MAY • 1950

ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE FOR SALESMEN OF ELECTRICAL PRODUCTS

A McGraw-Hill Publication

Electrical Farm Mechanization

America's Most Admired Fixture!

Illumination PLUS
Point-of-Sale Merchandising
Wins New Friends for

Leader OFFICER

VL and NHC Series

LEADER VL-440 SPECIFICATIONS

Housing, channel and deep drawn end caps of 20 gauge steel, finished in white, high-gloss baked enamel. Extruded tubular side panels and moulded one-piece louver is of glowing white plastic that is warp-proof, colorfast, and destaticized. Louver swings down for easy servicing. Choice of 31° or 45° shielding. May be used as single units or in continuous runs—suspended or ceiling mounted. VL Series uses 2, 3 or 4 40-watt 48" T-12 lamps. Wired units include UL and ETL approved sockets, type FS easily replaceable starters and two high p.f. 2-lamp ballasts. Conventional 110-125 volts, 60 cycle A.C. Other voltages on request. NHC Series available for use with Slimline tubes and for 120, 200, 300 or 425 milliampere operation in lengths from 48" to 96".

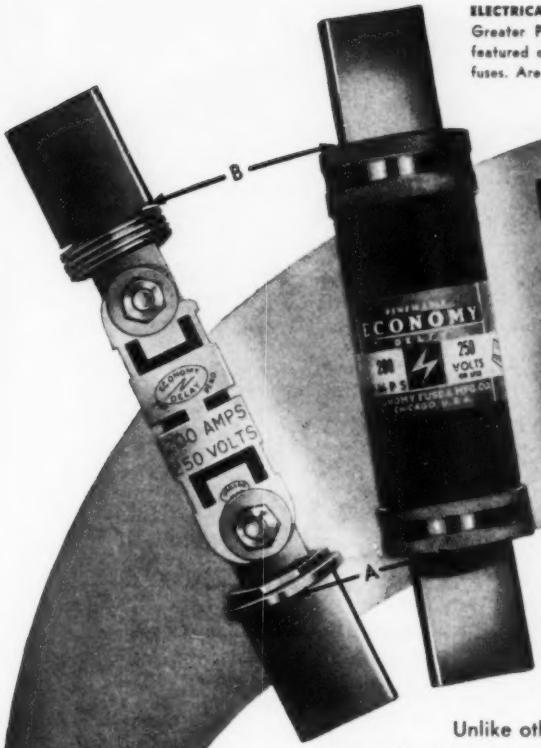
You'll find this attractive fixture installed in the most tastefully decorated offices, stores and office buildings. The "Officer" not only adds to any decorative effect, but helps sell goods and services through appealing highlighting of floors, furniture and display sales material. The LEADER "Officer" is rich in construction, too. For example, it is provided with the famous LEADER one-piece louver of destaticized plastic . . . a louver with a multitude of small, rigid apertures—made possible by one-piece molding—to provide excellent shielding and soft, gracious light-diffusion.

Sold and installed only by the better electrical wholesalers and contractors

Leader America's No. 1 Lighting Equipment Manufacturer

LEADER ELECTRIC COMPANY • 3500 NORTH KEDZIE AVENUE • CHICAGO 18, ILLINOIS
LEADER ELECTRIC—WESTERN • 800 ONE HUNDREDTH AVENUE • OAKLAND 3, CALIFORNIA

ELECTRICAL WHOLESALERS: The Trouble-Free Performance and Greater Protection of ECONOMY "DE-LAY" Renewable Fuses are featured every month in ads like these, to men who buy and specify fuses. Are you ready with a complete stock?



Economy KNIFE BLADES keep *Perfect Alignment*

Due to exclusive design and construction (Patent applied for), accurate alignment of knife blades is maintained automatically in the new Economy "DE-LAY" Renewable Fuses.*

Unlike other Fuses, the Economy knife-blade assembly seats *only* at the lower end (A) which enters the cartridge tube *last*.

The upper end (B) is a threaded plug member which acts like a Float—compensating for any dimensional changes and preventing any pressure developing on the knife blades—thus eliminating the chief cause of knife-blade misalignment.

That is why Knife Blades in Economy "DE-LAY" Fuses are in perfect alignment.

Specify Economy "DE-LAY" Fuses to eliminate the major cause of poor contact, and insure long life to the fuse cartridge.

Your Electrical Wholesaler has the new Economy "DE-LAY" Fuses and Renewal Links in Stock.

ECONOMY DE-LAY RENEWABLE CARTRIDGE FUSES

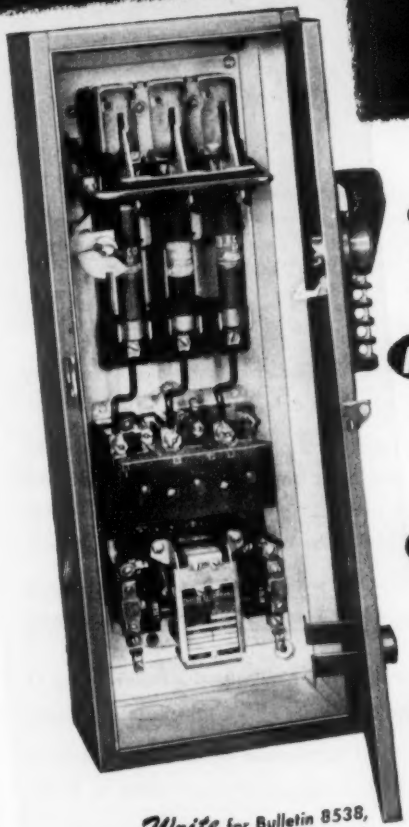
*Give maximum protection in the 135 to 200% overload ranges where most "blows" occur.

You are invited to write for the New Economy Catalog

2449 EW

ECONOMY FUSE AND MFG. CO., 2717 GREENVIEW AVE., CHICAGO 14, ILLINOIS REPRESENTATIVES IN ALL PRINCIPAL CITIES

DESIGN LEADERSHIP



THIS NEW SQUARE D COMBINATION STARTER (SWITCH TYPE) offers Greater Operator Safety and Longer Motor Starter Life

NEW ***Switch Operating Mechanism*** provides maximum operator safety. Interlock prevents opening door when disconnect is on. When door is re-closed, self-aligning handle indicates true position of disconnect. Operating handle can be locked on or off with one, two, three or four padlocks of varying sizes. Handle-locking mechanism also locks door.

NEW ***Switch Design*** has quick make and quick break action—no dead center—visible blades for easy checking—magnetic arc plate for high rupturing capacity—dead-front line terminals, protected by hinged arc chamber cover—positive pressure jaws and fuse clips—non-tracking insulation.

NEW ***Features in Magnetic Starter Design*** Square D's time-proven design has always provided easy installation, simple maintenance, and long life. Now, even longer life is assured by straight line, guided motion of armature and movable contact assembly which eliminates bearing and reduces wear. For added convenience and flexibility, Square D starters now have NEMA standard mounting and wiring.

Write **for Bulletin 8538, SQUARE D COMPANY, 4041 North Richards Street, Milwaukee 12, Wis.**

Visit us at the N.A.E.D. CONVENTION • Booths 166, 167

SQUARE D COMPANY

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ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

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New Address .....

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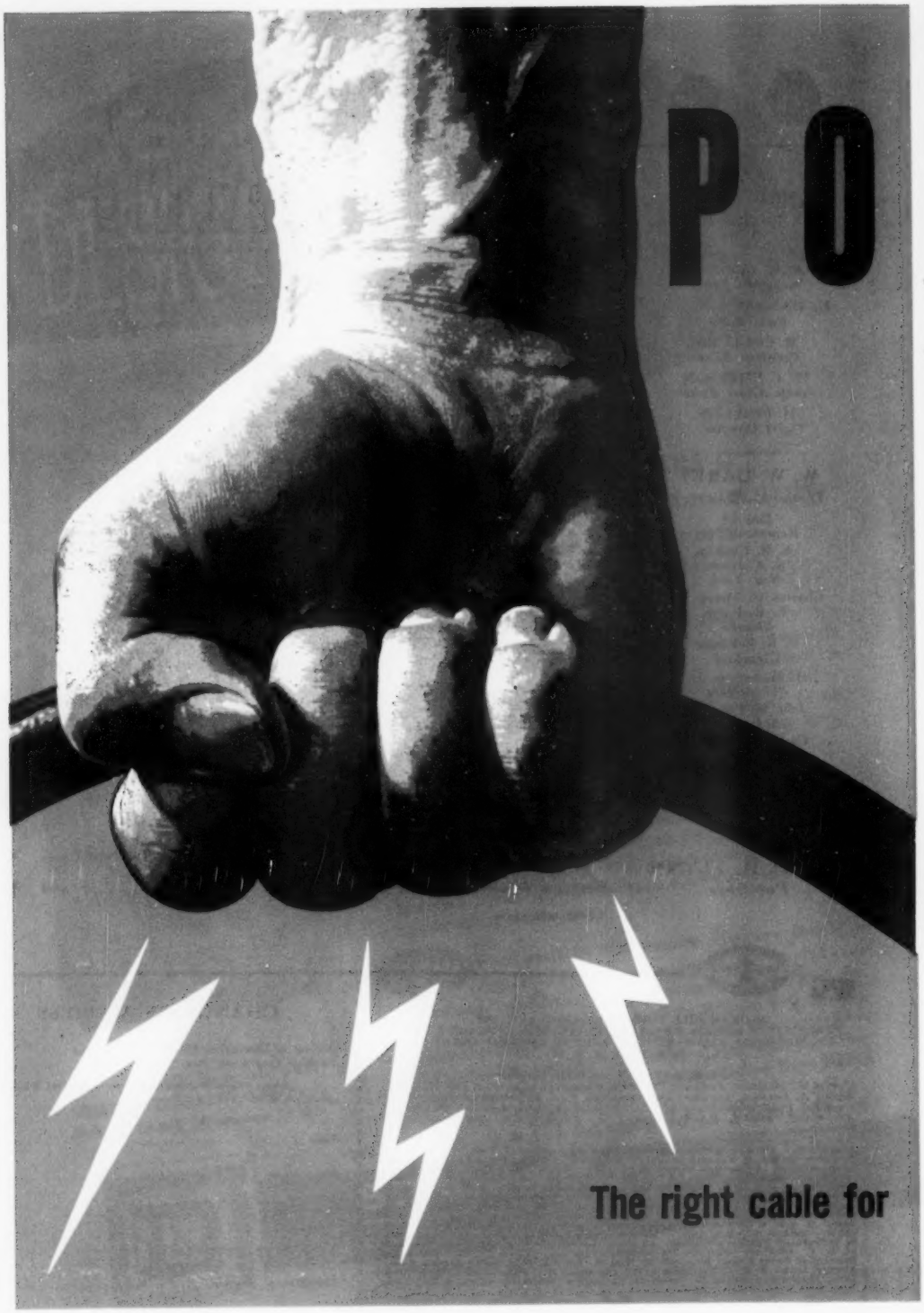
New Title or Position .....


PO
The right cable for

WER UP

and be prepared!

THAT'S THE CHALLENGE to 9 out of 10 industrial plants—and yours may be one! It's the challenge to prepare those plants to make full use of electric power by modernizing obsolete, worn out wiring systems, by providing adequate wiring capacity *now* and for the *future*.

POWER UP—And Be Prepared! is Anaconda's new Industrial Wiring Modernization Campaign to help industry make full, efficient use of the electric power it buys . . . to eliminate costly power waste caused by overloaded circuits, worn out electrical equipment, inefficient distribution and failure to provide for added power loads.

LIKE ANACONDA'S previous industry-wide campaigns, "Industrial Modernization," "Preventive Maintenance" and "Wire Ahead," this newest Anaconda program is designed to enlist the engineering knowledge and skills of Electric Utilities, Contractors and Wholesalers in helping American industry to POWER UP—And Be Prepared! Anaconda Wire & Cable Company, 25 Broadway, New York 4, New York.

the job **ANACONDA**® Wire and Cable

PLUGIN FA BUSDUCT

YOUR ELECTRICAL DOLLARS WILL GO MUCH FARTHER with Plugin FA Busduct . . . because here's an electrical distribution system designed to economize on everything but efficiency.

By providing convenient plug-in outlets every foot of the way, there's always a ready power source for new or present equipment anywhere along the production line . . . just plug-in wherever you want . . . no slowing down production to make needed changes . . . no expensive wiring delays . . . no high cost electrical maintenance . . . in fact, there's nothing much to do but *plug-in and let 'er roll.*

Add up these and many more cost-cutting features of Plugin FA Busduct . . . and you'll agree that here is the electrical distribution system that makes ends meet in more ways than one.

FA POWER PLUGIN, the new midget-size Plugin FA Busduct of 50-amp. feeder capacity, is now available for equipment requiring connections for ½ to 3 HP motors, 240 volts or less, AC or DC (7½ HP maximum, with dual-element fuses).

Featuring all the convenience, flexibility and economy of Plugin FA Busduct, this new Underwriter Laboratories approved duct is made in 5-ft. and 10-ft. sections with plug-in outlets every 20 inches . . . additional outlets and special lengths available on special order.

For more information about Plugin FA Busduct and FA Power Plugin, write for Bulletins 701 and 703 . . . or talk to your FA Representative (he's listed in Sweet's).

FA TRADE MARK

Frank Adam Electric Co.

ST. LOUIS 13, MISSOURI

Makers of BUSDUCT • PANELBOARDS • SWITCHBOARDS • SERVICE EQUIPMENT • SAFETY SWITCHES • LOAD CENTERS • QUIKHETER

THIS IS WHAT WE CALL SALES INSURANCE!

132 advertisements will appear in magazines the next twelve months to inform hundreds of thousands of buyers about Acme Electric Transformers.

This is sales insurance subscribed to and paid for as positive evidence that our cooperation extends to helping you sell Acme Electric transformers by keeping your customers informed about their quality features, values and applications.

Transformers are a big business — and should be an important part of your sales. Are they? Write us about transformer sales opportunities in your territory.

ACME ELECTRIC CORPORATION

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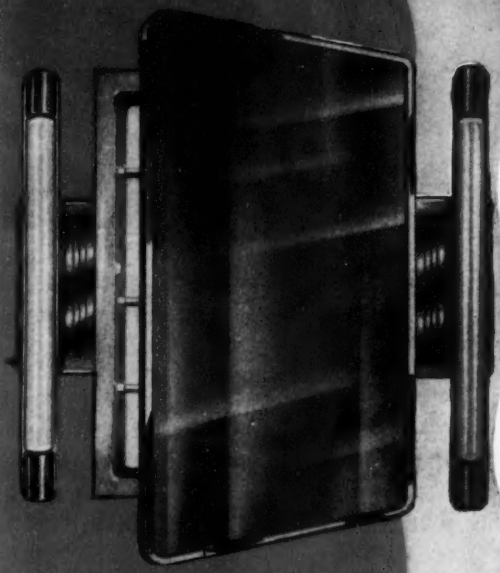
Acme ACME Electric
TRANSFORMERS

AVAILABLE NOW.....



30 Distinctive Lighted Models
Fluorescent or Incandescent

America's ONLY COMPLETE LINE OF SEAMLESS DRAWN BATHROOM Cabinets

- A high quality seamless line made in a complete range of 4 cabinet sizes in 30 models. Available to jobbers and dealers who are fed up with mediocre quality and small profits.
- PACKARD has come to the front producing one of the country's leading lines of bathroom cabinets with a real merchandising plan . . . a modern floor display stand on which are mounted any 4 models in the line. Customers are invited to see for themselves because the display stand invites point-of-sale investigation.
- A really profitable Bathroom Lighting Feature for you to sell.

the PACKARD line FOR '50-'51

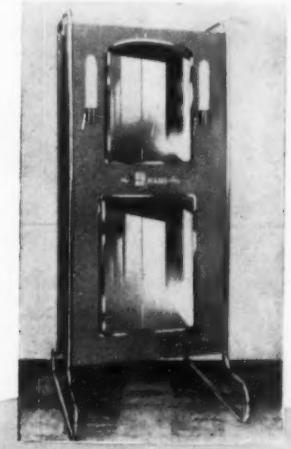
THIS MODERN PORTABLE DISPLAY STAND AVAILABLE FOR YOU AND YOUR DEALER

To Help Sell

Here is the ideal way to sell and merchandise bathroom cabinets . . . here is a line that has genuine customer appeal because of styling and quality.

The stand holds 4 cabinets . . . 1 of each of 4 sizes in the PACKARD line . . . is 72" high . . . 30"x30" at the base. Sturdily constructed of 18-gauge furniture tubing. Steel panels. Shipped knocked down. Easy to assemble.

One Side Display Stand shown on Sales Floor

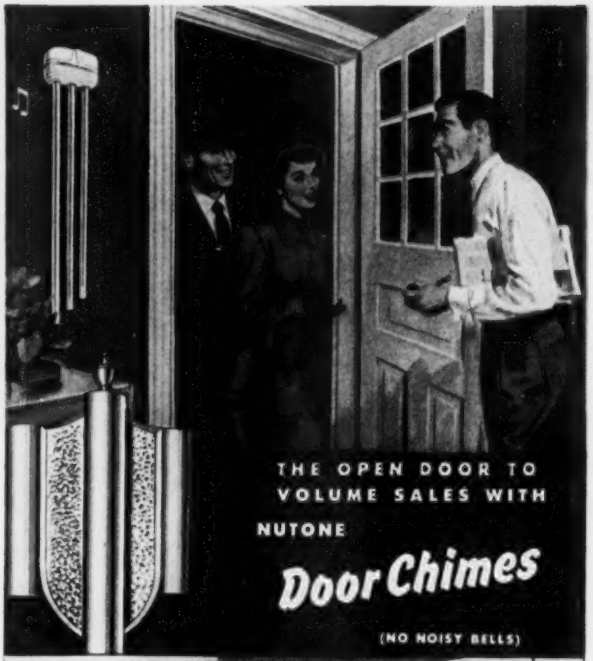


Reverse Side of Stand

Write for complete catalog on the PACKARD Line and information on how you can get this display for your own showroom.

PACKARD FORMSTEEL CORPORATION

3354 NO. CRAWFORD AVE. CHICAGO 41, ILL.



THE OPEN DOOR TO VOLUME SALES WITH

NUTONE

Door Chimes

(NO NOISY BELLS)

PLUS SALES APPEAL with

NUTONE

Kitchen Ventilators

(NO KITCHEN SMELLS)

U.S. PAT. PEND.

NUTONE

TRADE MARK

NUTONE
BRINGS YOU
Double Feature NEWS! (AND SALES)

25,000,000 Housewives—and Architects, Builders, Contractors are reading NuTone's national advertising campaign against "Noisy Bells and Kitchen Smells." We are convincing them that NuTone Door Chimes and NuTone Kitchen Ventilators are a *double feature* needed in every home.

A million new homes will be built this year . . . thousands of replacements will be needed in older homes. This huge market offers big volume NuTone business for you . . . your dealers and wiring contractors. Write for details . . .

NUTONE, INC.

National Headquarters
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Eastern Sales
200 Fifth Ave., New York
Midwest Sales
Merchandise Mart, Chicago
Western Sales
919 E. 31st St., Los Angeles
Southwest Sales
1118 Jackson St., Dallas

KIRLIN

BETTER RECESSED LIGHTING

DETROIT, MICHIGAN

New!

INSTALLATION METHOD

Saves $2.00

or more on installation cost

NO ASBESTOS WIRE NEEDED

Rubber-covered wire runs direct to fixture

NO CARPENTER WORK

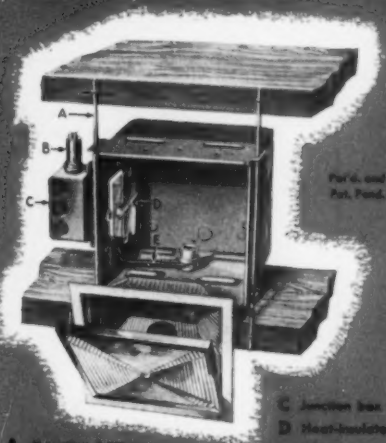
Applies to all KIRLIN incandescent models. All parts required for installation furnished with fixtures—AF pigtails; wire-nuts; junction box; heat insulated cover; support bars and staples; tape; everything needed to the R.C. building wire.

KIRLIN

Recessed Fixtures

are made in all sizes—
square or rectangular—
and in fluorescent

- Alzak GlasSurfaced Aluminum Reflectors
- Spread-type or Concentrating Lens
- Hinged Rust-resisting Doors in Diecast Frames
- Individually packed for shipping
- U.L. and IBEW LABELS
- NOTHING HANGING FROM CEILING



Pat'd. and Pat. Pend.

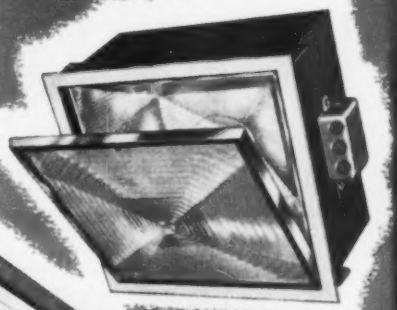
A Mounting bars

B Romex or RC wire

C Junction box

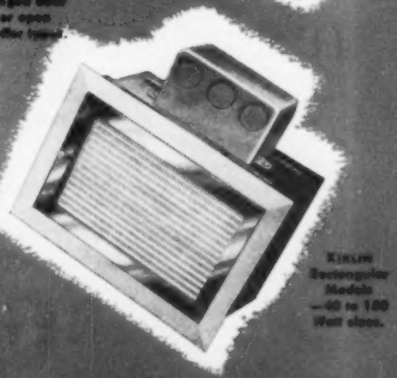
D Heat-insulated cover

E AF wire pigtails



KIRLIN Square Models 100 to 500 Watt sizes.

KIRLIN Fluorescent for wide distribution of light. Hinged door or open louver type.



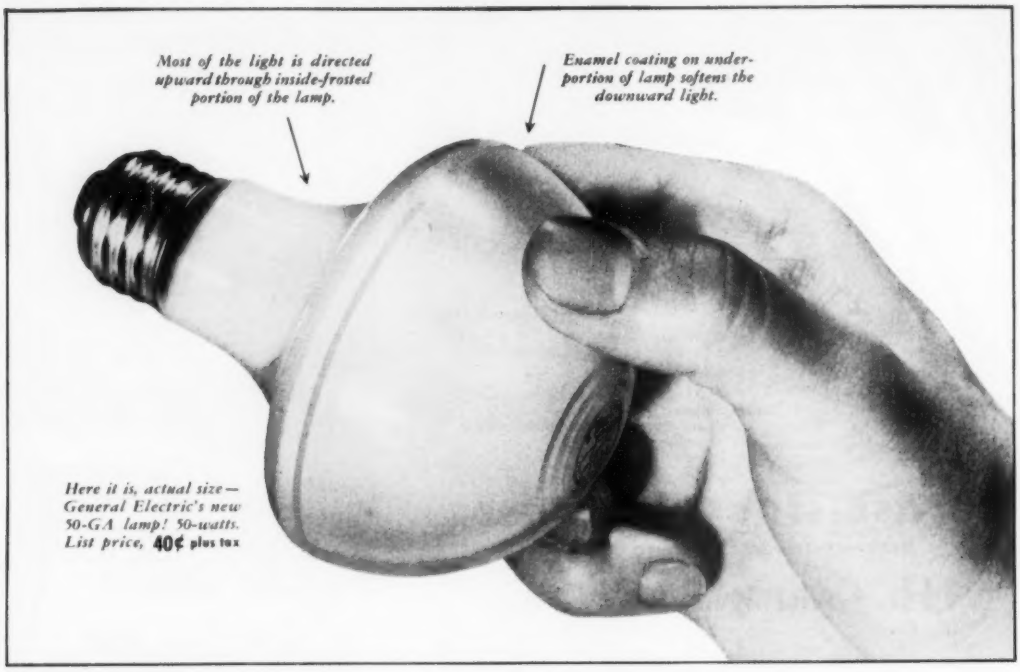
KIRLIN Rectangular Models —40 to 100 Watt sizes.

In stock at leading wholesalers everywhere.

The KIRLIN CO.

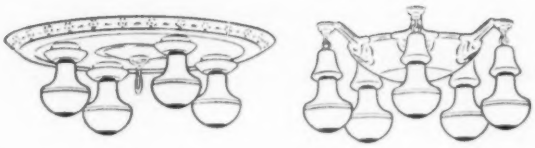
3435 E. Jefferson Avenue

Detroit 7, Michigan



A market of 100,000,000 sockets for this new kind of lamp!

New General Electric 50-GA lamp is specially designed for fixtures like these . . .



HERE'S a new General Electric lamp bulb to meet the needs of the hundreds of customers in your neighborhood who have ceiling fixtures like those shown here. It's the new 50-GA lamp—specifically designed for overhead lighting fixtures where bare lamps in base-up position are now used. This new lamp bulb adds beauty to chandeliers and fixtures, gives a charming, indirect-lighting effect, softens the light to flatter home furnishings.

The secret lies in a revolutionary new shape that directs most of the light upward, plus an enamel coating on the lower part of the lamp which gives the downward light added softness and warmth.

Surveys indicate that American homes have more than 100,000,000 sockets which need 50-GA lamp bulbs. And since customers buy six or eight 50-GA lamps at a time to fill an entire chandelier, your agents make a high unit sale. Get your share of this big market by reminding General Electric lamp agents to feature 50-GA lamps prominently. Now available in 50-watt size at 40¢, plus tax.

GENERAL ELECTRIC

LISTED UNDER REEXAMINATION SERVICE OF UNDERWRITERS' LABORATORIES, INC.

a profitable discovery

. . . enables you to offer better fittings, with a reputation for dependability, at a competitive price. Conduit Pipe Products are today's top fittings value.

The familiar U. L. Label is assurance of strict conformity to Industry specifications.

A quarter century reputation for dependability means uniform quality.

Price? You are invited to compare the price of Conduit Pipe Products. You'll see what we mean.

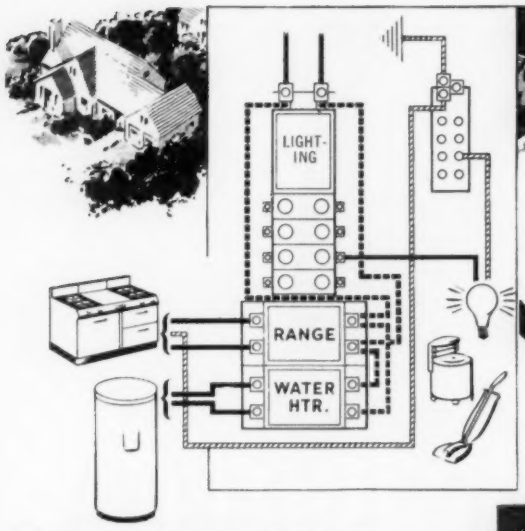
Sold only through recognized wholesalers.

Write *today* for discounts and literature.

Conduit of COLUMBUS

CONDUIT PIPE PRODUCTS CO., COLUMBUS, OHIO

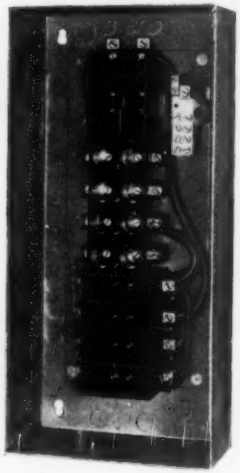
PIPE COUPLINGS • PIPE NIPPLES • ELBOWS, 90° and 45°
RUNNING THREAD • GOOSENECKS • WALL PLATES

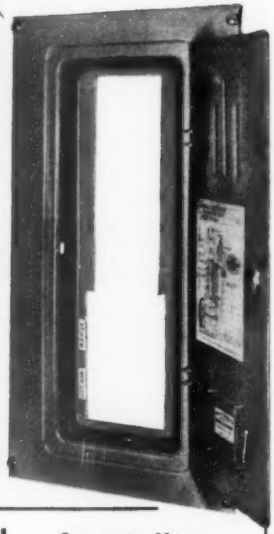


A NEW Reason why the Switch is to General

General Switch Cat. No. 663-108, Main-Range-Water Heater Combination Triple Pullout Unit

100 Amp main lugs feed the 60 Amp pullout switch controlling from 4 to as many as 12 plug fused lighting circuits. The main lugs also feed the Range and Water Heater pullout switches . . . available in 30 or 60 Amp and non-interchangeable to prevent overfusing. Flush or Surface. Underwriter Laboratories approved.

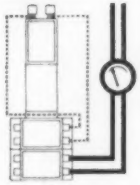




THE new GENERAL Main-Range-Water Heater Combination Triple Pullout Unit, the latest addition to the GENERAL SWITCH extensive line of enclosed switches and panels, means a real saving in time and materials, is a neat, compact unit, is thoroughly dependable and . . . the price is right.

The development of this all-in-one unit is another step forward in the GENERAL SWITCH planned program of product development of "unitized" equipment for simplified electrical systems at lower cost.

Save time and save money . . . investigate this new unit and *Switch to* GENERAL *today*! Available everywhere exclusively through wholesalers.

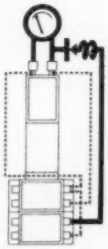


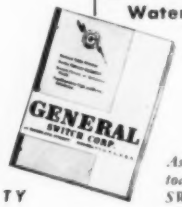
Separate Meter for Water Heater

Simply remove jumpers and feed the water heater pullout switch through separate meter.

Carrier Relay or Time Clock Water Heater Disconnect

Remove one jumper and connect water heater switch through disconnect element of meter.





Ask your wholesaler or write today for the GENERAL SWITCH 68-page catalog.

General Switch Corp.

49 Roebling Street Brooklyn 11, N. Y.

SALES OFFICES IN EVERY MAJOR CITY

NEW 56 PAGES

of helpful Facts, Figures and Photos of HAZACORD MOLD CURED FLEXIBLE CORDS and PORTABLE CABLES

TIME-SAVING ENGINEERING DATA

Engineering tables covering electrical and physical characteristics of a complete range of types and sizes of cables, including special cables . . . Formulas for determining amps., hp, kw and kva . . . Tables of Correction Factors . . . etc.

VALUABLE "HOW TO" SUGGESTIONS

Step-by-step description, diagrams, photographs on how to splice portable cords and cables . . . Recommendations and descriptions of splicing materials . . . Illustrated uses of flexible cords and portable cables.

HELPFUL "SELECTION" INFORMATION

The complete line of Hazard flexible cords and portable cables . . . Construction features . . . Operating data . . . Manufacturing methods . . . Results of tests and actual service.

MANUAL GIVES INFORMATION ON ALL TYPES OF CABLES:

Type SO and SJO Flexible Cords
Shielded Microphone Cord
Shot Firing Cord
Hospital Silent Call Cord
Miner's Lamp Cord
Super Flexible Welding Cable
Types W and G Portable Cables
Shovel and Dredge Cables
Train Jumper Cable
Railway Utility Cable
Grounding Cable
Trolley Bus Cable
Power Jumper Cable
Molded Terminals

You will want to have this new, 56-page Hazard manual as a handy reference on flexible cords and cables. It's designed throughout to help you in selecting the exact cord or cable for maximum efficiency and long life.

For your copy, write on your letterhead for Bulletin H-420 — Hazard Insulated Wire Works, Division of The Okonite Company, Wilkes-Barre, Pa.

HAZARD Insulated wires and cables for every electrical use

6274

Cummins ALL-ANGLE HEAD *Electric Drill*

CAPACITY IN STEEL, ½; IN SOFT WOOD, 4"
NO-LOAD SPEED ALL-ANGLE HEAD, 275 R.P.M.

It's a natural for every "tight spot" drilling job. Combined weight of drill and Angle Head is 10 lbs. With Angle-Head in fixed position, width of unit is 7½".

On every job every day . . on new work and in plant maintenance . . . electricians need this new Cummins All-Angle Head Electric Drill. Convenient for operator to use even when drilling through joists set on 12" centers. The All-Angle feature enables the operator to drill in practically any hard-to-get-at spot. Angle head can be quickly removed, chuck is then mounted directly on spindle of drill, converting unit to the conventional type ½" electric drill. It's a dual purpose tool for all-purpose drilling.

Powered by the Famous Cummins Model 200, ½" Standard Duty Drill

$69.50 LIST PRICE

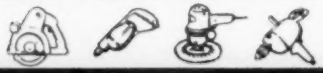
Here is a tool built to "take it" day in and day out on the job. More than 46,000 now in use is your assurance of top performance and long life. It has all the wanted mechanical features you will find in drills selling for as much as 35% more. The frame is die cast aluminum, light, strong and compact. Gears are helical cut of finest steel for smooth, quiet operation. Bearing construction is combination ball, needle roller and Oilite, mounted in proper position for maximum wear. Equipped with the famous Jacobs 33B chuck. Heavy duty rubber covered cord and 100% overload capacity, momentary contact switch, with lock for continuous operation. Drill unit bought separately—$39.95 list. Equipped with All-Angle Head attachment—$69.50 list.

Top Discounts enable you to sell the dealer trade profitably.

Tool is held in this position by operator. Auxiliary pipe handle cradles in operator's arm, resisting torque of drill. Hand fits Angle Head comfortably. Tool is safe to use in all positions.

OVER 60 YEARS OF PRECISION MANUFACTURING SINCE 1887

Cummins PORTABLE TOOLS



DIVISION OF CUMMINS BUSINESS MACHINES CORPORATION
4740 NORTH RAVENSWOOD AVENUE • CHICAGO 40, ILLINOIS

ASK YOUR JOBBER . . . ASK YOUR JOBBER . . . ASK YOUR JOBBER . . . ASK

MORE THAN 626,000 INVITATIONS LIKE THIS

ARE GOING TO CONDUIT BUYERS

Month after month Spang advertising invites buyers to contact Central Rigid Steel Conduit Distributors. In 1950 over 626,000 similar messages will appear in leading electrical trade journals read by important buying influences. Imagine then the tremendous number of contacts Spang has made during the many, many years it has advertised. But advertising is just one way that we try to help distributors. We are continuing, as always, to supply them with products of outstanding quality.

SPANG-CHALFANT

Division of The National Supply Company
General Sales Office: Grant Bldg., Pittsburgh, Pa.
District Offices and Sales Representatives in Principal Cities

Are you a Quiz Kid on Fluorescent Lighting?

try this quiz to test yourself

Q. Is the light output of a fluorescent tube affected by ballast operation?

A. Yes. Some uncertified ballasts reduce light output by 20%! CERTIFIED BALLASTS assure rated light output.

Q. Does the ballast affect lamp life?

A. Decidedly. Improperly designed ballasts can lower lamp life by as much as 1,000 hours in a 40 watt lamp. CERTIFIED BALLASTS assure full lamp life.

Q. How can one guard against overheated ballasts?

A. Use CERTIFIED BALLASTS in well designed fixtures.

Q. Do some ballasts last longer than others?

A. Yes. A CERTIFIED BALLAST should outlast the life of the installation.

Q. Can ballasts be a source of noise?

A. Audible "humming" is often due to the ballast. CERTIFIED BALLASTS produce a minimum of noise.

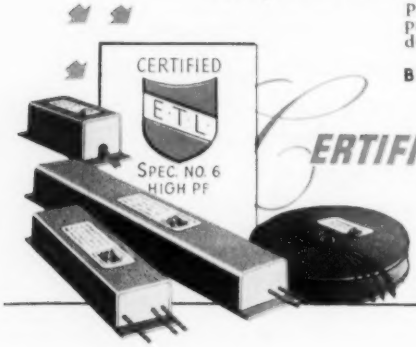
Q. What ballasts are made to exacting specifications, then tested and checked by Electrical Testing Laboratories, Inc., who certify that they conform to these specifications?

A. CERTIFIED BALLASTS!

Q. Who makes CERTIFIED BALLASTS?

A. Any manufacturer who wishes to produce ballasts that meet the specifications may participate in the CERTIFIED BALLAST MANUFACTURERS program. Currently 10 leading ballast manufacturers are producing CERTIFIED BALLASTS.

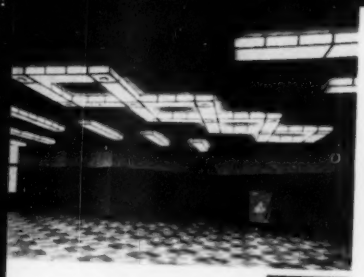
BE SURE... ALWAYS SPECIFY CERTIFIED BALLASTS!



CERTIFIED BALLAST MANUFACTURERS

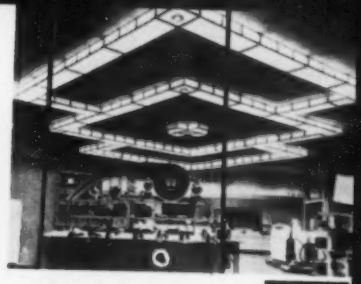
Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO

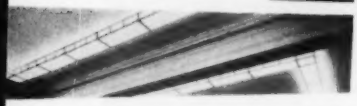


Display Room • St. Paul, Minn. **SOLD**

Conference Room • Macon, Ga. **SOLD**



Appliance Store • El Dorado, Ark. **SOLD**



General Office • St. Paul, Minn. **SOLD**

Automobile Showroom • Detroit, Mich. **SOLD**

these 4 low-cost modules are the "building blocks" of a perfect custom-fitting lighting installation . . .

A 4 14-Watt T-12 15" Type F Lamps

B 32-Watt 12" Circline Lamp, and 1 PAR Spot or Flood Lamp

C 4 40-Watt T-12 48" Type F Lamps

D 4 75-Watt T-12 425 Milliamp Slimline Lamps

modules fit together perfectly end to side, end to end, side to side... to form more than 50,000 different lighting patterns...to fit any ceiling shape or size...mixing all light sources in one harmonious system... with equal brightness throughout (no dark sides or ends)...so you can put the light where it is needed!

Only MITCHELL makes MODULE

SOLD wherever you tell the module selling facts:

module is custom-fitting Here's the *new* lighting that *fits* any commercial interior to a "T". Four basic MODULE units are the "building blocks" or "dominoes" of light. They fit together easily, economically, to form over 50,000 different patterns. They custom-fit any room shape or size. They put the light *exactly* where it's needed. MODULE is the *only* lighting that *custom-fits* with standard low-cost units.

module delivers 20% MORE LIGHT Proved in actual use—MODULE delivers 20% EXTRA light per unit! Yes—the MODULE translucent plastic molded louver passes 20% MORE LIGHT. This means more light per dollar—fewer fixtures required to meet footcandle specifications. This means *more* light, *better* light at no more than the cost of ordinary fixtures.

module installations are never obsolete No MODULE lighting system is ever obsolete. Here's why: As lighting needs change, more units can be added at any time, at any point in the system—without installing a single new electric outlet box because MODULE units connect together electrically and mechanically. MODULE lighting is never "locked-in"—the "building blocks" of light simply slip into place easily and economically exactly as required.

module is newest, finest And there's nothing in lighting that will *stay* newer and finer than MODULE. Yes—a MODULE installation remains modern for years, because: it custom-fits and "grows" with every lighting need; it delivers *more* light; its appearance has an undated "always contemporary" look. No ordinary fixtures can match these MODULE advantages.

TELL THIS STORY—IT SELLS

MITCHELL **module**

REG. U. S. PAT. OFFICE

IF YOU HAVEN'T ALL THE **module** FACTS, WRITE TODAY

MITCHELL MANUFACTURING COMPANY
2525 N. Clybourn Avenue • Chicago 14, Illinois
In Canada: Mitchell Mfg. Co., Ltd., 11-25 Davies Ave., Toronto

ELECTRICAL INSULATION IS OUR SPECIALTY

Q. *What ONE wire and cable producer grows its own natural rubber, and makes its own synthetic rubber?*

A. UNITED STATES RUBBER COMPANY.

Q. *What ONE wire and cable producer makes plastics?*

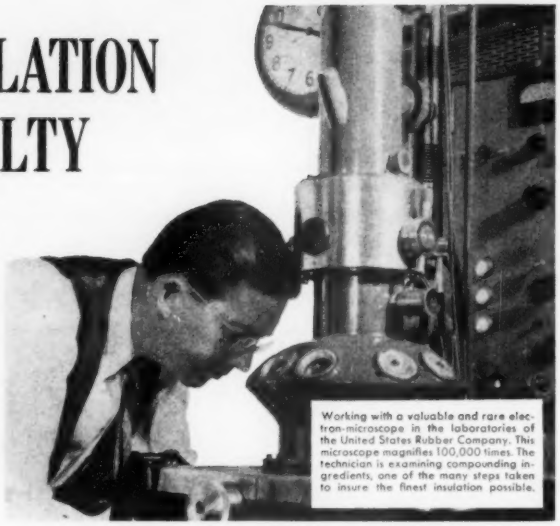
A. "U. S."

Q. *What is the most important part of wire and cable?*

A. The insulation.

Q. *Who is best equipped to make wire and cable with superior insulation?*

A. U. S. RUBBER—which grows its own natural rubber, makes its own synthetic rubber, manufactures its own plastics.



Working with a valuable and rare electron-microscope in the laboratories of the United States Rubber Company. This microscope magnifies 100,000 times. The technician is examining compounding ingredients, one of the many steps taken to insure the finest insulation possible.

Isn't it logical that a rubber company should make the best wire and cable insulation there is? U. S. Rubber has been a pioneer in insulation for over 70 years—has amassed in that time a stockpile of research data and experience that can't be beat. Electrical insulation is a "U. S." specialty!

Electrical insulation makes the difference between superior and ordinary wire and cable. Conductors of all manufacturers are standard, but insulation must be the best that science can produce. That's why your best bet in wire and cable is U. S. Rubber.

SOME MORE OF THE MANY DIFFERENT VARIETIES OF "U. S." WIRE AND CABLE

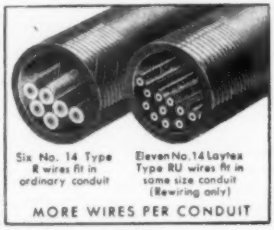
BUILDING: Laytex RU—world's smallest diameter, lightest weight natural rubber covered building wire. **Neolay RU**—with Laytex insulation plus Neoprene; nylon cover makes pulling 5 times easier. **Laytex RUW**—with the insulation resistance that increases in wet locations.

Neoprene Covered Service Entrance Cable—Flame-retardant, moisture resistant—first ever accepted by Underwriter's Laboratories, Inc. **Aluminum Wires and Cables. Cord Sets with Electrix Plugs.**

HEAVY INDUSTRY: Power Cables—of every description including Neolay Aircraft Wire. **Royal Master Portable Cords. Royal Mining Machine and Locomotive Cables**—tested seven different ways to insure complete dependability. **Control Wires**—insulated with Laytex RU for greater circuit integrity. **Municipal Signal Cables**—Insulated with Laytex RUW for maximum mositure-resistance. **Welding Cables • Machine Tool Wire • Switchboard Wire • Thermostat Cable • Bus Drop Cable.**

HERE'S WHY U. S. RUBBER INSULATION "KNOW HOW" MAKES THE WORLD'S BEST BUILDING WIRE

U. S. Laytex RU Building Wire is smaller in diameter than ordinary wires. Its insulation is applied with uniform thickness, resulting in perfect centering and no thin spots. A unique dip or pass method, perfected by U. S. Rubber Company, applies 90% pure rubber to the conductors, eliminating the usual bulkiness and weight. On rewiring jobs, eleven No. 14 Laytex Type RU wires fit in a conduit that ordinarily would hold only six No. 14 Type R wires. A special wax finish makes this wire 33% to 300% easier to pull than the average, according to laboratory tests.



U.S.RUBBER
SERVING THROUGH SCIENCE

UNITED STATES RUBBER COMPANY

ELECTRICAL WIRE & CABLE DEPT. • ROCKEFELLER CENTER, NEW YORK 20, N.Y.

"My panelboard sales are 'way up with this profitable *Pushmatic** plan!"

THERE'S a Pushmatic to meet every load condition: THERMAL-MAGNETIC and THERMAL-MAGNETIC with exclusive AMBIENT COMPENSATING FEATURES. Both are identical in size and contour, in ratings of 15, 20, 30, 40 and 50 amperes, 1 pole, 120 V., or 2 poles, 120-240 V., AC. All are interchangeable for rating and type.

BullDog advertisements in leading Contractor publications have announced this timesaving plan to your customers. Follow them up *now* for a faster turnover, bigger profits.

Sales features of sensational Pushmatics!

- Push-button switching
- Trip-free automatic protection
- Positive protection against overloads and short circuits
- Approved by Underwriters' Laboratories

BULLDOG ELECTRIC PRODUCTS COMPANY

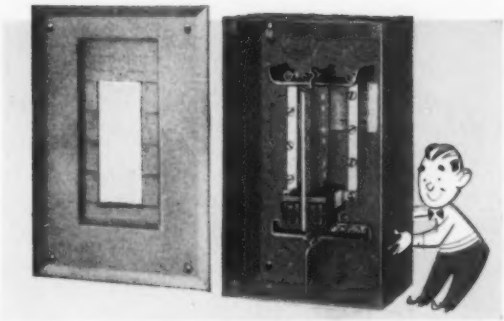
DETROIT 32, MICHIGAN • FIELD OFFICES IN ALL PRINCIPAL CITIES
IN CANADA: BULLDOG ELECTRIC PRODUCTS OF CANADA, LTD., TORONTO

***PUSH*—It's ON!**
***PUSH*—It's OFF!**
***PUSH*—It's ON again!**

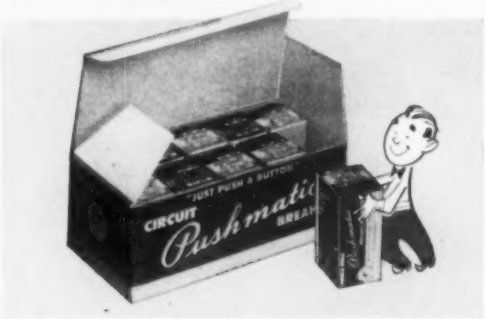
*Push-button switch with automatic protection for electric circuits

BULLDOG

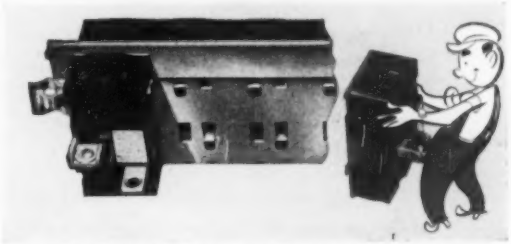
HEADQUARTERS FOR ELECTRICAL DISTRIBUTION



1 "I'm moving Pushmatic Electri-Centers *fast* and helping my Contractor customers, too, by urging them to order several basic Electri-Centers and fronts plus . . .



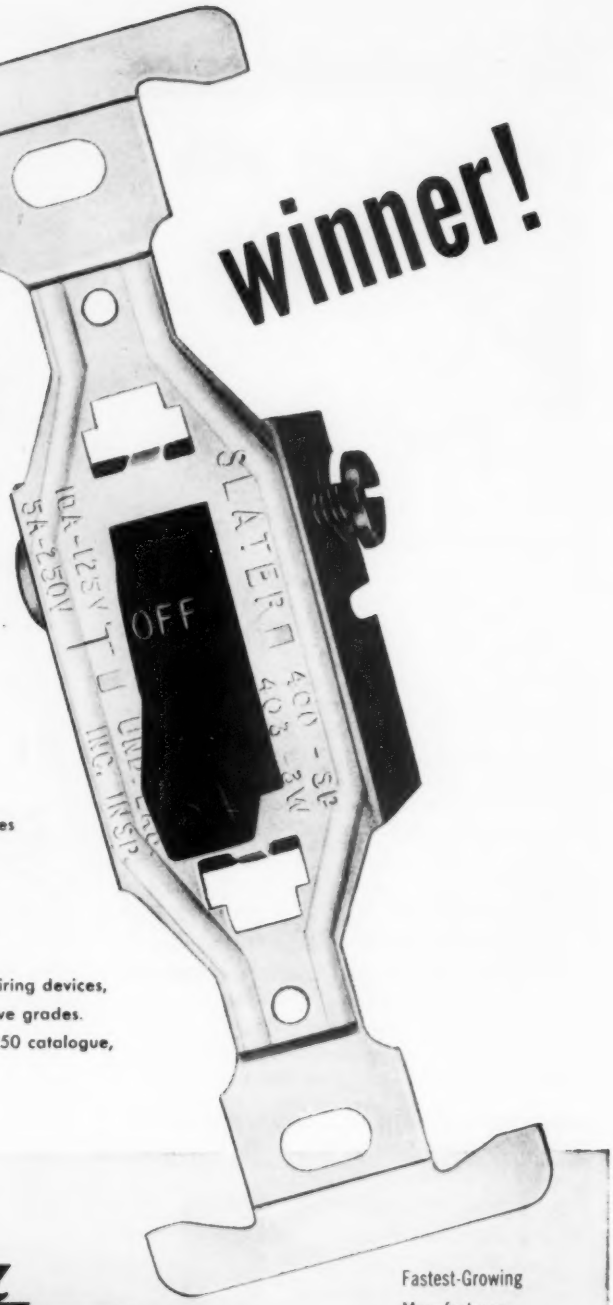
2 "a few cartons of flexible, interchangeable Pushmatics. With this emergency supply on hand, Contractors can get the jump on any rush job by . . .



3 "simply hooking Pushmatics of the desired ratings and types on the mounting rib and connecting them to bus bars with a screw driver.

4 "This simple plan gives users prompt service, saves Contractors valuable time on rush jobs, and really steps up my turnover for a bigger profit. I'm sold on it!"

the winner!



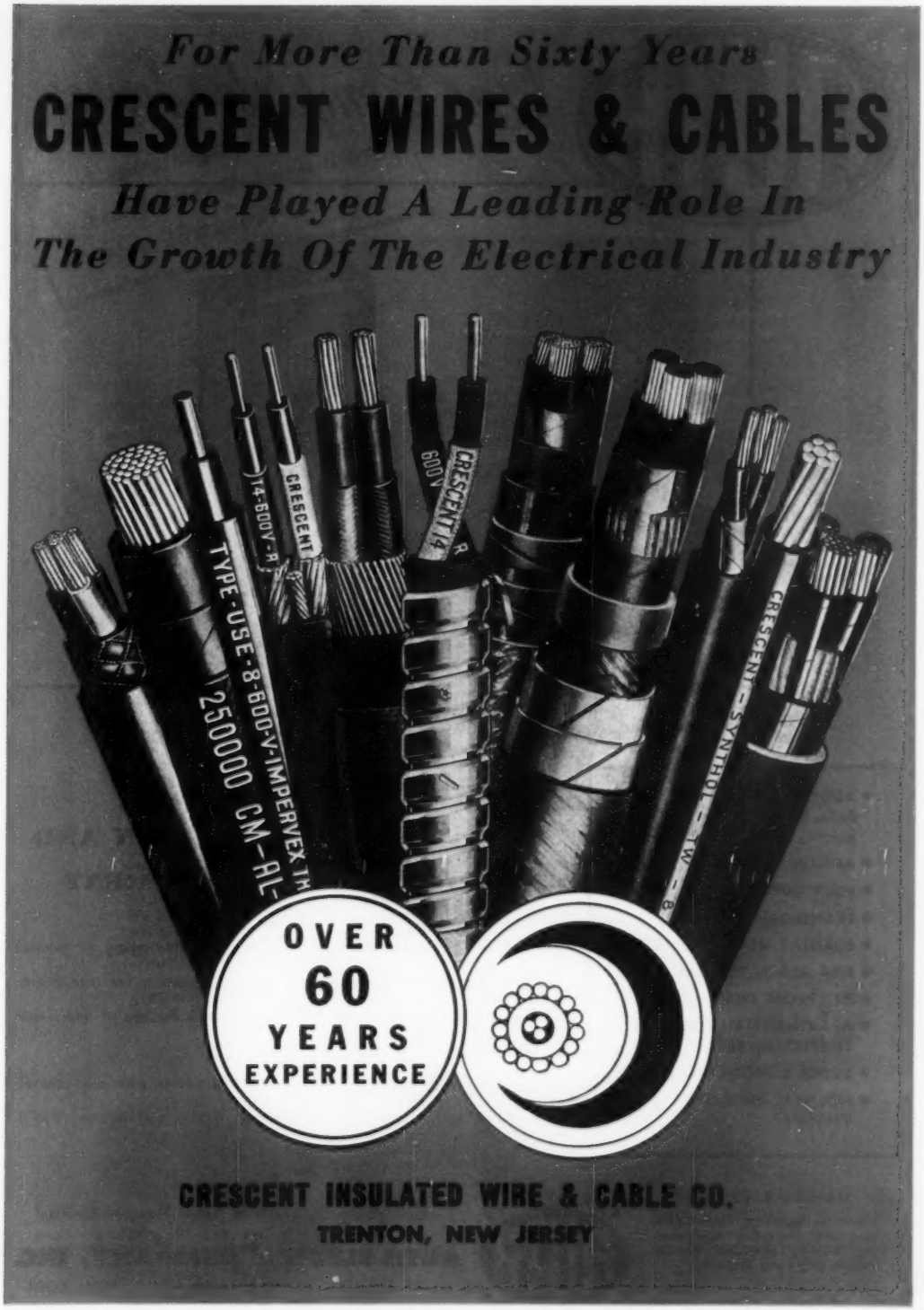
- Takes Heavy Loads
- No Arcing, No Pitting, No Failures
- Smoo-oo-ooth Positive Action
- Easy Wiring
- Economically Priced
- Each Switch Individually Tested

Slater makes a quality line of wiring devices, both specification and competitive grades. Write Dept. W for your free 1950 catalogue, listing over 150 Slater devices.

Slater
ELECTRIC & MFG. CO.
WOODSIDE, NEW YORK
Lifetime wiring devices

Fastest-Growing Manufacturer In The Field

Be sure to visit SLATER Booth 241 at N.A.E.D. CONVENTION


For More Than Sixty Years
CRESCENT WIRES & CABLES
Have Played A Leading Role In
The Growth Of The Electrical Industry
TYPE-USE-8-600-V-IMPERVEX TM
250000 CM-AL-
14-600V-R
CRESCENT
600V
CRESCENT 14 R
CRESCENT-SYNTHOL-TW-8
OVER
60
YEARS
EXPERIENCE
CRESCENT INSULATED WIRE & CABLE CO.
TRENTON, NEW JERSEY

AUTH *One Complete Source*

- **AUDIBLE SIGNALS**
  Bells, Buzzers, Chimes (Non-Electric), **Sirens, Horns**
- **ANNUNCIATORS**
- **PUSH BUTTONS**
- **TRANSFORMERS**
- **BURGLAR ALARM DEVICES**
- **FIRE ALARM SYSTEMS**
- **INTERCOM TELEPHONES**
- **APARTMENT MAIL BOXES; TELEPHONE, BELL SYSTEMS**
- **CLOCK & PROGRAM SYSTEMS**
- **HOSPITAL SIGNALING SYSTEMS**

ELECTRICAL SIGNALING, PROTECTION AND COMMUNICATION EQUIPMENT

Auth's *complete* line eliminates the necessity for going to several sources for similar stocks — and Auth's reputation for competitive prices and quality merchandise protects you in the use of *one single source of supply!*

Inspect an Auth Catalog! Compare Auth products with any others! Investigate Auth's reputation for integrity, quality and service! You'll be glad to *depend* on Auth.

MANUFACTURERS OF

Electrical Signaling, Communication and Protective Equipment for Housing, Hospitals, Schools, Offices, Ships and Industry.

SINCE 1892 AUTH

Complete Systems • One Responsibility

AUTH ELECTRIC COMPANY, INC.

34-20 45TH ST., LONG ISLAND CITY 1, NEW YORK

A message to Authorized Amprobe Distributors

Those distributors who took part in the highly successful Amprobe promotion during January will agree that it lived up to every expectation. The following comment by an eastern distributor is brief, to the point, and sums up the experience of most of the Amprobe distributors:

> "In the entire year of 1949, we sold a grand total of twelve split-core volt-ammeters, or an average of one a month. *During the first three weeks of January, we sold twenty Amprobes, just by taking it around to show to our customers.*"

The conclusion is obvious: From a merchandising and sales volume standpoint, the Amprobe has little in common with the type of split-core volt-ammeter the market has previously known.

> The Amprobe has now been accepted in every section of the electrical field as the development that takes the split-core volt-ammeter out of the "heavy equipment" class, and makes it a *personal* instrument.

THOUSANDS IN DAILY USE

Thousands of Amprobes have now been in daily use for months. *Rarely has an electrical instrument been given such unqualified acceptance by the field.* We believe this is a real tribute to the instrument's accuracy, its ruggedness, its soundness of design and construction. This record has proved conclusively that a split-core volt-ammeter does *not* have to be big, bulky and expensive in order to perform dependably.

COMPACT AND CONVENIENT

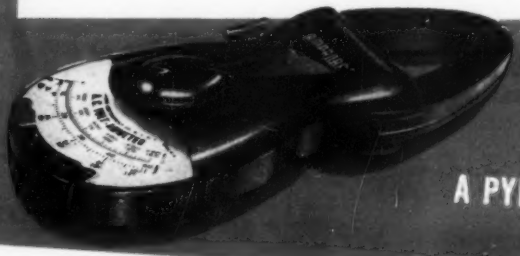
Its compactness, its convenience, its extremely low cost makes a potential Amprobe owner of every engineer, maintenance man, electrician, contractor, motor service man, refrigeration and air conditioning repair man.

Significantly, the bulk of Amprobe sales have been to customers who had never before owned a split-core volt-ammeter, and who had had no previous intention of getting one. You can see what we mean when we say that the Amprobe has opened up a completely new *mass market.*

To authorized Amprobe distributors we say: What you have seen so far is only a beginning. We are now working on an even greater campaign, which you will be hearing about soon. Meanwhile, remember, the market for Amprobe has only been scratched. You should be able to double your present Amprobe volume by having your salesmen carry the instrument on every call, and actually placing it in the prospect's hand. Everyone who handles the Amprobe is intrigued by it.

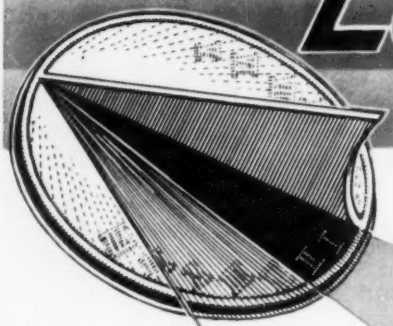
Our selling policy continues to protect you: *Every Amprobe sale through a recognized distributor only, no matter how large or important the purchaser.*

PYRAMID INSTRUMENT CORP.
49 Howard Street, New York 13, N. Y.



A PYRAMID INSTRUMENT

Proportional LOW COST INSTALLATION TIME



because of simplicity of modern design

USUAL TIME

NEW T&B TIME

Most contractors cannot afford to measure time by a sun dial. The dollars slip away too fast.

T&B Engineers always design with the installation in mind. They make fewer loose parts in each fitting. They plan those parts to come apart and go together easily; hence quickly. Such designing produces superior fittings that install quicker. When prices are competitive, it's the installed cost that counts.

For example, look at the 3/8" 90° Angle Connector: one screw . . . . all steel . . . . Underwriters' Laboratories listed. The unique, case hardened locknut bites into the box for a ground that's certain—a definitely superior fitting.

THE THOMAS & BETTS CO.
INCORPORATED
ELIZABETH 1 NEW JERSEY

Scratch your address and #321 on a post card. We'll send you a folder and a free sample.

T&B PRODUCTS SOLD ONLY THROUGH THE T&B ELECTRICAL WHOLESALER

for

Steady Sales

Stock the Brand in Biggest Demand

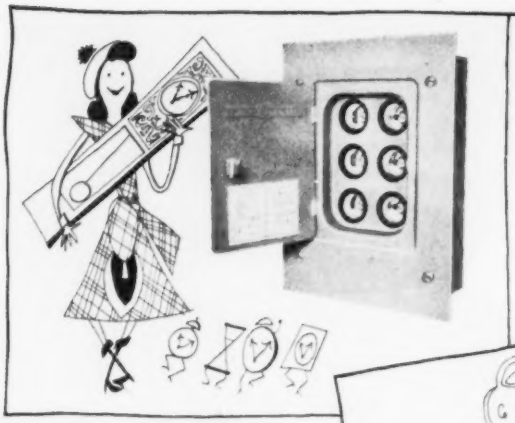
This year from *ten to twelve million dollars worth* of standard, dry-type, step-down transformers (in ratings of from .1-100 kva) will be sold in this country. Used for stepping down power circuit voltages to service lighting and small power loads at 115 or 230 volts, they have a place in practically every industrial plant. They are staple, self-moving items that practically sell themselves. If you stock them, they'll move.

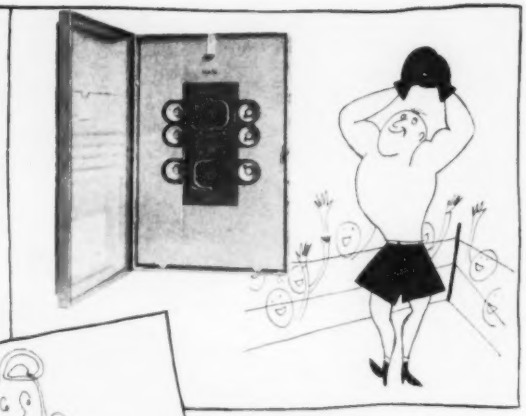
But to get your *full share* of this bread and butter business, *stock the brand in biggest demand*—GENERAL ELECTRIC. M&D's on your shelf will mean money in your pocket.

M&D's are available for quick delivery to any recognized electrical wholesaler. Why not place your orders now? Bulletin GEA-897 gives full information on these transformers. Ask for your copy from the nearest General Electric office or write Apparatus Department, General Electric Company, Schenectady 5, New York.

GENERAL ELECTRIC

411-70





It's a step-saver, a TIME-SAVER

It's neat and compact. Fits perfectly into unused wall space in kitchen or hallway. Dead-front shield gives protection while changing fuses.

Trumbull's Step-Saver Residence Panelboard is easy to install. Line terminals—all solderless—are right at the bottom where you can get at them. Available in 2 through 12 circuits in flush or surface mounting.

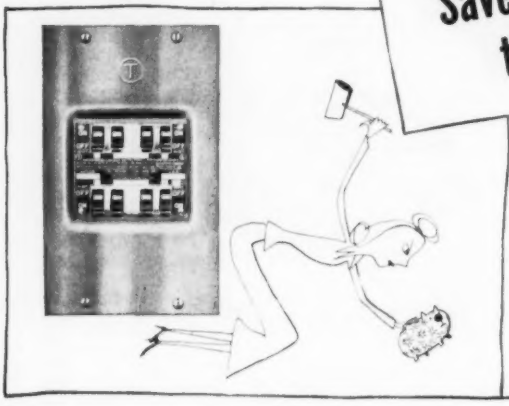
Sell her safety

Save yourself trouble

Plenty of knockouts, BUT NO "KO'S"

Inside Trumbull's Fuse-Puller Residence Panel there's plenty of clear channel wiring room. The neutral is extended to save wire. Plenty of regular knockouts—small knockouts for use with a ground cable.

ON and OFF clearly indicated. Fuse caps are not interchangeable.



Another Good TRUMBULL Profit-Maker

Saves installation cost . . . PENNIES, TOO

Here's automatic short-circuit and overload protection at a price comparable with ordinary fuse protection. Multi-Breaker Load Center can be wired with breaker or solid mains.

No temptation now to use a penny. With the trouble fixed, just move handle to OFF to reset, then flip to ON. No fuses to bother with.

Type D Side-Operated Enclosed Switch

Compact design saves space. All parts accessible from front. Plenty of knockouts—solderless wire clamps. 20 to 200 amp. General-purpose and rain-tight enclosures.

Write for catalog on Trumbull equipment for residences. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn.

Come in and see us in Booth 144 at the National Association of Electrical Distributors meeting.

TRUMBULL (T) ELECTRIC

TRUMBULL'S TRAINLOAD OF NEW PRODUCTS

HELP
YOUR SALESMEN SELL
MORE ROYAL WIRE...
ROYAL
for HOME and INDUSTRY
ROYAL TOP QUALITY
ELECTRIC WIRES
ROYAL
ELECTRIC WIRE
FREE for you and your salesmen! Now your salesmen don't have to sell from price sheets alone. Here are 3¼" samples of ROYAL Quality wire, permanently bound into a colorful pocket folder that makes wire selling a cinch!
Small, but big in sales rewards.
WRITE FOR YOURS — TODAY
ROYAL
WIRE • CORD SETS • CARTRIDGE AND PLUG FUSES
FUSTATS • TROUBLE LIGHTS • CHRISTMAS LIGHTING SETS
ROYAL ELECTRIC CO., Inc., PAWTUCKET, R. I.

Installed in 1909, in ducts under State Street, Chicago, by the Chicago Street Railway Co., a lead-sheathed, paper-insulated, 1,590,000 CM aluminum cable was opened in 1945 to test the insulation for deterioration. Pronounced satisfactory, the cable was cut back into service, joints and taps again made by soldering—just as in 1909. Cable still in service, 1950.

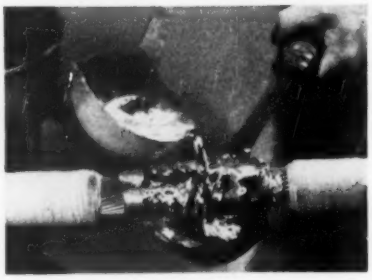
Performance has been proved on

insulated Aluminum Conductors

Performance of aluminum conductors has been proved after service in industrial applications for as long as 45 years. Your free copy of "Questions and Answers about Alcoa Aluminum Conductors" will show you, for example, feeders installed in 1905; bolted dead ends on feeders installed in 1913; soldered connections installed in 1916.

Now, nationally-known manufacturers are "in business" on aluminum, producing these wanted, needed, low-cost types and sizes. Big sizes, especially, where aluminum can cut wire costs in half.

Write today for your free copy of "Questions and Answers about Aluminum Conductors". It will help you answer the questions your prospects will be asking after they see Alcoa's hard-hitting advertising campaign in leading trade magazines. ALUMINUM COMPANY OF AMERICA, 1783E Gulf Building, Pittsburgh 19, Pennsylvania.



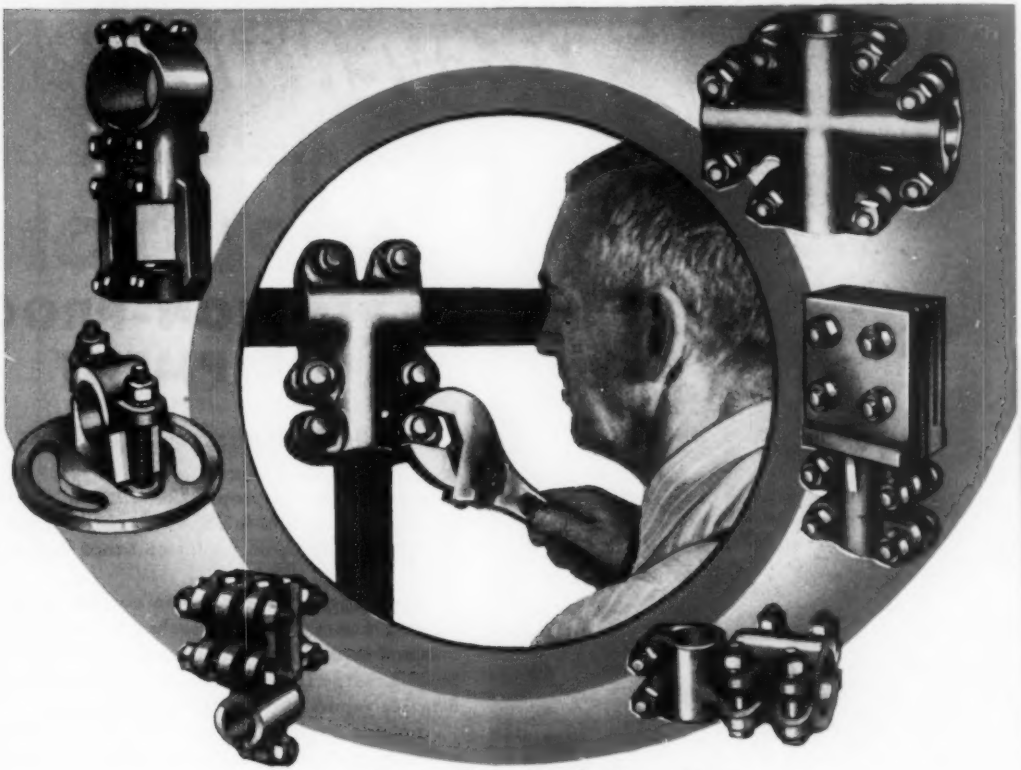
Aluminum is soldered exactly the same as copper with Alcoa Solder and Flux recommended.

Insulated **Aluminum Conductors**

ALCOA ALUMINUM

of ALCOA EC ALUMINUM are made by leading manufacturers

When you need any POWER CONNECTOR—



—*see the Complete line*

Probably the exact Power Connector you want is one of the standard Penn-Union items. You will find Tee and Stud Connectors and Solderless Terminal Adapters, Bus Supports, Terminals, Elbows, Cross Connectors, Couplers, Reducers—each in a wide range of sizes up to the largest.

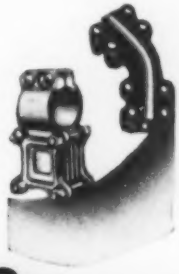
Also the *complete* line of Service Connectors, Cable Taps, Straight and Parallel Connectors, Grounding Clamps — every good type of conductor fitting. Penn-Union connectors are the first choice of experienced users, because of their *known dependability*, mechanically and electrically.

Sold by Leading Wholesalers

PENN-UNION ELECTRIC CORPORATION

ERIE, PA.

Canada: Dominion Cutout Company, Ltd.
250 Richmond St. West, Toronto

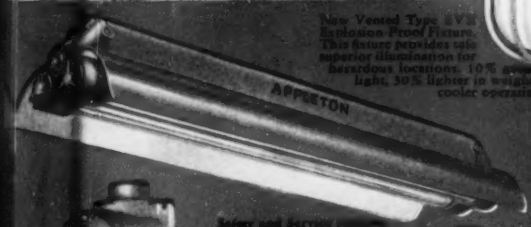


THE *Complete* LINE OF CONDUCTOR FITTINGS

PENN-UNION

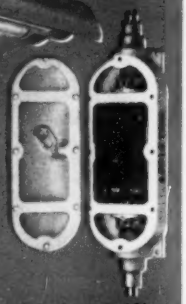
PERMANENT DISASTER PREVENTION!

New Vented Type EVE Explosion-Proof Fixture. This fixture provides safe superior illumination for hazardous locations. 10% more light, 30% lighter in weight—cooler operating!

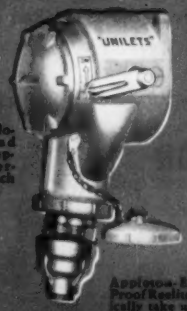


Safety and serving features of the Appleton Type EFC Explosion-Proof Fluorescent Lighting Fixtures make them foremost in design of fluorescent lighting for hazardous locations.

The Appleton Seal-Line Switch Unilet is a combination switch housing and sealing unit. Provides complete explosion-proof performance without the need of additional sealing fittings.



View of Appleton Seal-Line Switch Unilet with cover removed, showing switch chamber isolated from splicing chambers in approved explosion-proof method.



Type FSOX Explosion-Proof and Dust-Tight Receptacle with interlocking safety switch and type FP plug.

Appleton-Explosion-Proof Reelites automatically take up and pay out conductor cable to machinery used in hazardous locations.

APPLETON
EXPLOSION-PROOF EQUIPMENT
For Hazardous Locations

Dangers to life and property that lurk in the wiring systems of hazardous locations are permanently eliminated when Appleton Explosion-Proof Equipment is used.

These rugged malleable iron conduit fittings and lighting fixtures confine treacherous arcs that cause fires and explosions in chemical plants, oil refineries, hospital surgeries—all locations where explosive or flamable vapors, dusts or gases are present.

Appleton Explosion-Proof Fittings are strong and unbreakable, roomy, truly threaded and machined, easy to install. And there is an Appleton Explosion-Proof Fitting exactly suited to every explosion-proof requirement.

Any wiring job—explosion-proof or otherwise—is a better wiring job when Appleton Electrical Fittings are used. So save time and build sales. Meet all your customers' wiring requirements with finest quality fittings from the 15,000-Item Appleton Line. Catalog information supplied on request.

SOLD THROUGH ELECTRICAL WHOLESALERS

APPLETON ELECTRIC COMPANY

1734 WELLINGTON AVENUE • CHICAGO 13, ILLINOIS

Branch Offices: NEW YORK, 50 Church St. • DETROIT, 3049 E. Grand Blvd. • CLEVELAND, 1836 Euclid Avenue • SAN FRANCISCO, 655 Minna St. • ST. LOUIS, 227 Frisco Bldg. • LOS ANGELES, 100 N. Santa Fe Avenue • ATLANTA, 724 Boulevard, N.E. • BIRMINGHAM 429 Brown-Marx Bldg. • MINNEAPOLIS, 305 Fifth St., S. • PITTSBURGH, 414 Bessemer Bldg. • BALTIMORE, 100 East Pleasant St. • BOSTON, 10 High Street • DENVER, 1921 Blake Street • PHILADELPHIA, 1017 Cherry Street • CINCINNATI, 626 Broadway • HOUSTON, 738 M. & M. Bldg. • HAVANA, Cuba, Malecon No. 9

Resident Representatives: Dallas, Indianapolis, Kansas City, Orlando, Milwaukee, New Orleans, Seattle • *Export Representatives:* International Standard Electric Corp., 67 Broad St., New York 4, N.Y.

APPLETON ELECTRIC PRODUCTS

APPLETON

CONDUIT FITTINGS • LIGHTING EQUIPMENT • OUTLET AND SWITCH BOXES • EXPLOSION-PROOF FITTINGS • REELITES

Washington STRAWS

TAXES. "On the hill" they are still wrangling over taxes, excess profit, excise, etc. "Slim chance for any excess profit tax" is the comment of the insiders but cutting down or out some of the excise taxes is certain.

Where to cut and how much is keeping the House Ways and Means Committee riled up. Every excise tax item discussed for trimming has its pro and con boosters and the problem of where to make up the "loss" caused by cutting excise taxes is still unsolved. It's a sure bet that there'll be no final report until June.

APPLIANCE SALES OUTLOOK. No less than the Federal Reserve Board is authority for the statement that appliance sales will be good the rest of this year—reason being that the Board's fifth annual survey shows that consumers still have plenty of money and—by their own statement—still want to buy plenty of appliances.

For instance more than twice as many consumers plan to buy television sets as expected to do so in 1949. Expected purchases of refrigerators and other major appliances stack up about equal to 1949 with some items scoring higher for 1950.

Also: Three out of every ten consumers expected their incomes in 1950 to be larger than the 1949 total. That then leaves it up to the retail salesmen to pry the money loose and—that is being found harder this year than last, but it's good to know that the money is there.

HOUSING. The Federal Reserve Board's Consumer Survey also indicates that more than 1,000,000 consumers have definite plans to buy new homes in 1950. Demand for homes costing less than $10,000 is stronger than in 1949, while those planning to buy houses costing more than $10,000 remains about the same as last year.

Obviously the 1950 sales of entrance equipment, roughin'-in wiring, and other electrical supplies for residential use should not just stay right up to last year's level but go higher as reports of units started are running well ahead of 1949.

The first 3 months of 1950 topped all previous records by 59 percent with 270,000 units started compared to only 169,800 started in the same period of 1949. March, 1950, alone saw 110,000 starts compared to only 80,000 in 1949.

OVERTIME AND GUARANTEED WEEKLY WAGE. The Wage-Hour Administrator has his own ideas on interpretations of contracts on guaranteed weekly wages where the objective is to avoid overtime payments to employees whose hours of work are irregular. Latest interpretation published by the W-H Administrator should be consulted because many employees would not be eligible even where the hours of work are irregular.

For example stenographers and file clerks would not be regarded as having irregular hours required by their duty, and thus are automatically not eligible.

BRANNAN BRANDISHINGS. A good many staunch Fair-Dealers are getting fed-up with Secretary of Agriculture Brannan's campaign of ridicule on price supports. They think it extremely bad politics to woo city voters by blaming high food prices

on government's price supports, thus piling up a lot of hot resentment in the farm states.

Some say that Brannan should either shut up and play ball or—get out. But Brannan is welfare-state minded. Getting city folks to feel that subsidies make high food prices softens the ground for getting thousands of voters to thinking about consumer subsidies and all too few would realize that as just another step toward the welfare state. That's why President Truman can't be expected to muzzle Brannan.

JUGGLING FIGURES. When a banker falsifies his statement to conceal a shortage and gets caught at it he goes to the penitentiary. If a person or business concern obtains loans or credit by juggling figures to conceal facts and then defaults, he too goes to the penitentiary—if caught. It looks now as if we may see the day when the U. S. Government does some juggling with figures for the sake of concealing the full extent of deficit financing.

None less than young Roosevelt, rooky Representative from N. Y., has a bill that would legalize what in polite accountant's circles would rate as "juggling" the bookkeeping procedures of the Government. For example, receipts from social security taxes (actually presumed to go into a trust fund) would rate as income, while expenditures such as money for farm price supports would no longer rate as outgo but become "investments." Let the boys get a taste of that kind of bookkeeping and what will become of the gold in Fort Knox and the silver in West Point?

ONE-ARMED BANDITS. Pressure to rush through a law to outlaw the manufacture of gambling slot machines in states where they are prohibited as well as their shipment into such states, is being neutralized by congressional maneuvering.

Conscientious legislators want to have a nation-wide investigation of crime, gambling syndicates and slot machine rings before moving on proper legislations. Others consider this politically too hot a potato to handle in a congressional election year. These will win, but the subject will come up next year.

NEW CONTRACT FORMS. The new forms for all supply-equipment purchases, now being issued by Government agencies, are designed to facilitate channeling purchases to "small business." Bidders must answer such questions as, if any contingent fees paid, number of employees, etc., etc. Should we expect that small business will get the orders if everything else is equal but the price is higher?

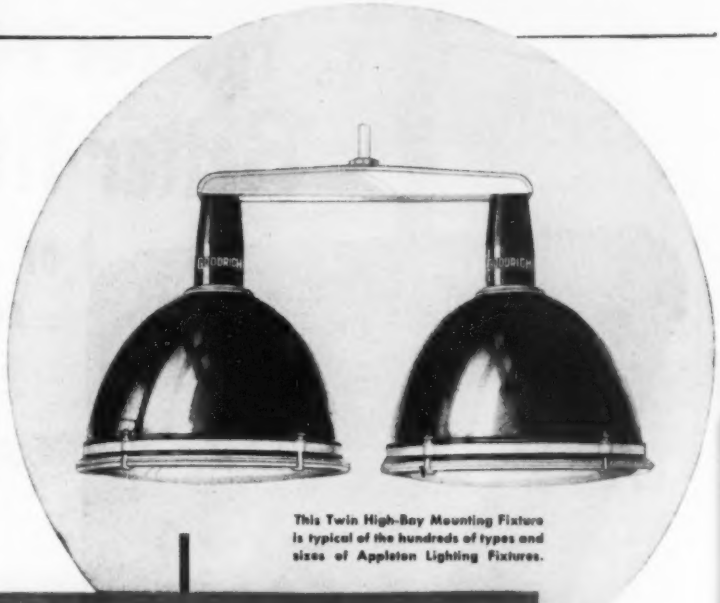
HOSPITAL BUILDING. After all the fanfare had died down and the country felt that the government's huge hospital building program was all set to go ahead, President Truman came along and ordered the program trimmed—to the tune of a 16,000-bed slashing. Unwilling to take the backlash of such action—the House in what some called an uproarious session, by almost unanimous vote, restored the 16,000-bed projects to the over-all program.

The bill still must pass the Senate—probably will—but a veto by the President is not improbable and then the outlook on the Fall elections will determine whether the veto will be over-ridden.

RAILROAD RELEASES. That's what they call it when business men or trade associations tell the Anti-Trust Division what they would like to do and get the plans Ok'd before proceeding. 'Tis said that about one out of four ideas draws the official blessing. The rest get either the complete thumbs down or suggestions for revamping. That's where an ounce of prevention is worth, not just a pound of cure, but maybe a juicy fine or a free vacation in Fort Leavenworth.

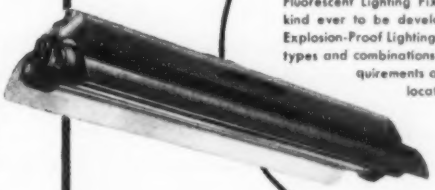
where there's profitable production

there's good light!



This Twin High-Bay Mounting Fixture is typical of the hundreds of types and sizes of Appleton Lighting Fixtures.

APPLETON LIGHTING EQUIPMENT



The Appleton Type EFU Explosion-Proof Fluorescent Lighting Fixture, first of its kind ever to be developed. Appleton Explosion-Proof Lighting Fixtures include types and combinations to meet the requirements of all hazardous locations in industry.

WHEN YOU SELL Appleton industrial lighting equipment, you're supplying the basis for top worker efficiency and better production. That's because Appleton fixtures are scientifically designed to provide proper illumination for any given working area, whether indoors or out.

The manufacture of Appleton Lighting Equipment is quality controlled from drawing board to final delivery. Reflectors are made of pure ingot iron, finished with vitreous-fired porcelain enamel for rugged weather resistance. Appleton sectionalized construction assures easy, economical installation, quick convenient servicing.

Whatever your customers' requirements, there's an Appleton Fixture that exactly suits the purpose. For better lighting that spells better production, sell Appleton—STANDARD FOR BETTER LIGHTING.

Write for complete catalog information

SOLD THROUGH ELECTRICAL WHOLESALERS

APPLETON ELECTRIC COMPANY

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Resident Representatives: Dallas, Indianapolis, Kansas City, Orlando, Milwaukee, New Orleans, Seattle • **Export Representatives:** International Standard Electric Corp., 67 Broad St., New York 4, N. Y.

APPLETON

CONDUIT FITTINGS • LIGHTING EQUIPMENT • OUTLET AND SWITCH BOXES • EXPLOSION-PROOF FITTINGS • REELITES

You can't buy Better Fittings or ones that cost less to use

Cross Section Showing Indentations.

Quicker to use and neater in appearance, Briegel All-Steel Indenter Fittings not only make stronger connections but also make each job more profitable to the contractor and satisfactory to his customers.

Two Easy Squeezes and they're set to stay. It is only natural that the Briegel All-Steel Indenter Fittings are the most widely used E.M.T. connectors and couplings. Contractors the world over recognize their cost cutting qualities and the fact that they make each wiring job neater, stronger and better.

All B-M Fittings Carry the Underwriters Seal of Approval

BRIEGEL METHOD TOOL CO.

GALVA, • ILLINOIS

DISTRIBUTED BY

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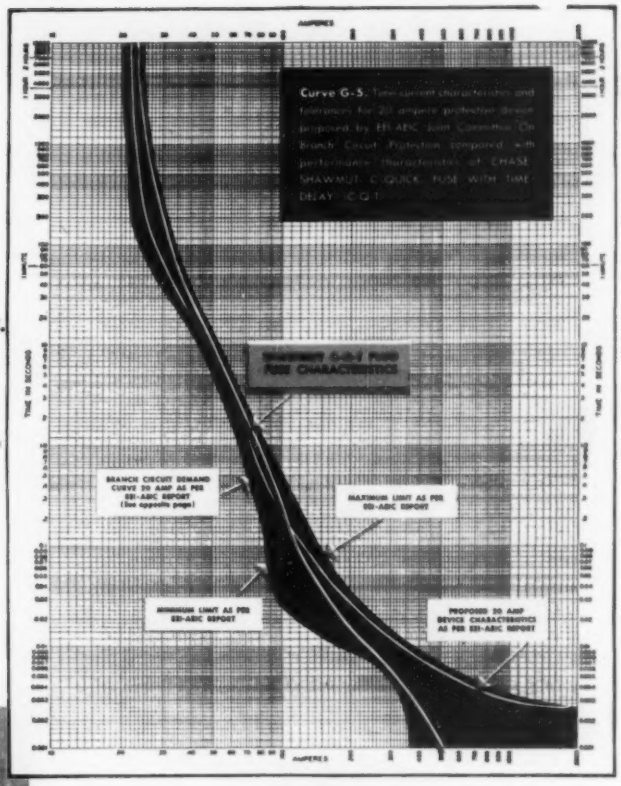
New C-Q-T Plug Fuse Gives

1. LONG TIME-DELAY...
enough to start a heavy washer.

2. SENSITIVITY...
enough to protect a cord.

HERE IT IS! See how the performance curve of the Shawmut C-QUICK FUSE WITH TIME-DELAY (C-Q-T) compares with the time-current characteristics for 20 ampere protective devices proposed by the EEI-AEIC Joint Committee on Branch Circuit Protection (Curve G5, page 30 of EEI-AEIC Report).



Shawmut C-Q-T Fuses, approved by Underwriters' Laboratories, Inc., come in the following ratings and color codes: 15 amp — blue; 20 amp — orange; 25 amp — red; 30 amp — green. Also in same ratings without color coding at slightly lower price.

Specify the NEW SHAWMUT C-QUICK PLUG FUSE WITH TIME-DELAY (C-Q-T)

A quick study of the above chart shows you that the Shawmut C-Q-T Fuse gives even better protection than the device proposed in the EEI-AEIC Report . . . *longer safe time-delay in the overload range . . . faster action in the short-circuit range.*

Designed for the average household branch circuit carrying a mixed load of appliances, it allows heavy-drawing appliances like washing machines to start and operate through their entire cycle. No needless fuse blowing . . . yet assures protection to lamp cords.

Put C-Q-T On Your Shelves NOW

The demand for this new device is fast growing among Utilities . . . it meets their specific needs. Contractors, too, are asking for it. This business will be coming your way — if you're ready to handle it. *Write for Free Bulletin.*

THE CHASE-SHAWMUT CO., 372 Merrimac Street, Newburyport, Massachusetts.

SINCE 1893

SHAWMUT Circuit-Matched FUSES

Insure More Accurately Engineered Protection For Any Circuit

NEW!

COMPACT! ECONOMICAL!

Murray LOAD CENTERS

with Fully Magnetic Circuit Breakers

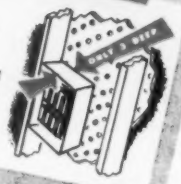
that are Interchangeable with Other New Single Pole Individually Housed Breakers

Now you can get all the advantages of *fully magnetic* circuit breaker protection in load centers that are trim and compact — with breakers that are interchangeable with other new single pole individually housed breakers! Now you can get utmost flexibility with minimum stock — make up your own combination right on the job! Now you can forget about "derating" . . . now you can banish the nuisance of false tripping . . . now you can make satisfactory installations of circuit breakers in warm or poorly ventilated locations—where space and cost are important!

These compact new Murray load centers are available in 2, 6 or 8 circuit models. They come equipped with the sensational new *small size* Murray fully magnetic circuit breakers — new 30 per cent smaller than previous fully magnetic circuit breakers — available in ratings of 10 through 50 amp. They save you time . . . save you trouble . . . save you money — yet assure the user positive protection combined with utmost satisfaction!

Shallower Box —

—only 3 inches deep—ideal for flush installation in "dry wall" construction. Plus a simple ⅜" plaster line adjustment!



See for yourself why Murray *fully magnetic* breakers can't trip from heat . . . never need derating . . . always carry rated load plus harmless overloads—even in warm locations and poorly ventilated panels. Clear, simple diagrams tell the story in this folder. Write for your copy today.

Murray MANUFACTURING CORPORATION

1250 ATLANTIC AVENUE • BROOKLYN 16, N. Y.

Electrical Safety Devices for Home and Industry

BLACKBURN
Hi-Strength
TERMINAL LUGS
YOUR BEST BUY-
5 REASONS WHY!
LISTED UNDER REEXAMINATION SERVICE
UL
BY UNDERWRITERS' LABORATORIES, INC.
1 Highest quality in the lowest price range.
2 Good profit margin.
3 Few sizes to stock—6 lugs cover a wire range from No. 14 to 1000 MCM.
4 Outstanding sales features—easier to sell.
5 Backed by national advertising and promotion.
Jasper Blackburn Products Corp.
Builders of Quality Products for 15 Years
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Send me sample and further information on BLACKBURN Hi-Strength Terminal Lugs:
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MAKE A *Good Connection* WITH WEAVER

1-WS
Copper to Copper
(Also available for general purpose use — 1-WS-C)

WSB-C
Cadmium Plated
General Purpose
(Also available for copper to copper connections—WSB)

K-1 Jumper Clamp
(Also available for aluminum, steel, or copper to similar conductor.)

A-111 Armor Rod Jumper Clamp
(Also available for aluminum to aluminum connections.)

WEAVER HOT LINE CLAMPS are cast of high strength HERCULOY to withstand maximum tightening without distortion. This exceptionally hard metal also produces a smooth, free running thread which efficiently converts the tightening torque to pressure on the conductor. HERCULOY also eliminates freezing of the tightening bolt so that clamps are easily removable.

Both main line and tap wire connections are secured with SHAKEPROOF lockwashers to provide permanent high pressure, trouble-free connections which won't loosen under vibration.

WEAVER HOT LINE CLAMPS are made in only two sizes which accommodate a large range of connections. There is no need to stock a big variety of sizes when you use WEAVER.

FOR TOP QUALITY AT LOWEST COST . . . YOU CAN'T BEAT WEAVER HOT LINE CLAMPS!

Write for the latest Weaver Catalogue

JAW

J.A. WEAVER CO.
2110 HOWARD ST. ST. LOUIS 6, MO.

Sell the all-purpose power cable

RoMarine - RoPrene

RECOMMENDED FOR

DIRECT BURIAL

OVERHEAD

IN CONDUIT

Here is the all-purpose power cable that will increase your sales. You can recommend and sell RoMarine-RoPrene for any power distribution job, whether for direct earth burial, installation in air, in conduit, or for circuits combining all three.

Check these advantages, then sell and install RoMarine-RoPrene

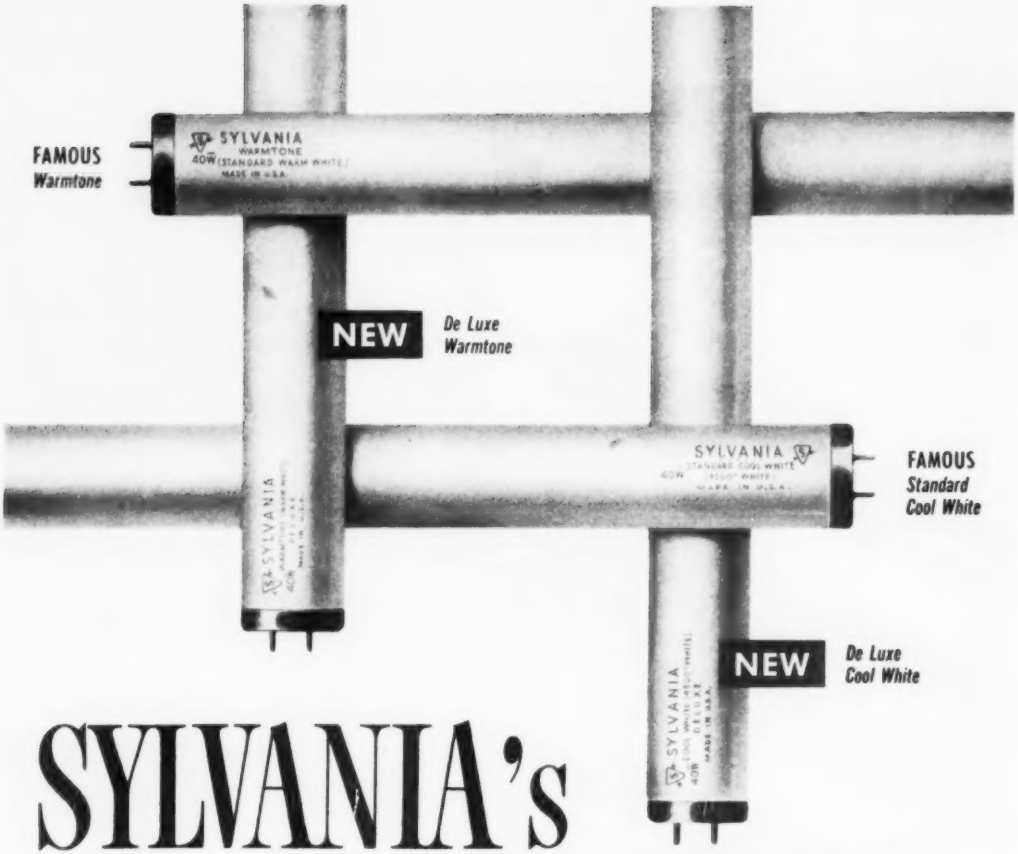
- RoMarine insulation is a quality compound possessing long-aging, as well as moisture and heat resisting properties
- RoPrene sheath is specially compounded Neoprene with high resistance to soil acids, alkalies, moisture, corrosive fumes, sun checking, flame and abrasion.
- Less costly than metallic sheathed cables . . . easier to handle and splice . . . eliminates problems of electrolysis.
- *First* to be approved by Civil Aeronautics Administration under Specification L-824 for airport wiring.
- Underwriters' approved as Type USE–Style RR.
- Available in single, two, and three conductors.

RoMarine-RoPrene cable has an excellent performance record. It is nationally advertised. Cash in on all of these advantages . . . sell it today!

ROME CABLE ROME, N.Y.

ROME CABLE
Corporation
ROME · NEW YORK
From Bar to Finished Wire

It Costs Less to Buy the Best
. . . Sell RoMarine-RoPrene



SYLVANIA's

New Fluorescent Lamp Tones **AVAILABLE NOW!**

Sylvania's 1950 range of fluorescent lamps now offers softer, warmer, DE LUXE tones for immediate delivery.

DE LUXE COOL WHITE . . . a brilliant development from already popular Standard Cool White. New advances in chemistry have enabled Sylvania's experts to release more red radiation from the lamp . . . giving an extended range and more flattering tones. STANDARD COOL WHITE (4500°) will, of course, remain a leading favorite in the general lighting of work areas.

DE LUXE WARMTONE . . . it's the latest version of the pioneer Warmtone. The new DE LUXE lamp, with peak red radiation, produces a cosmetic effect wherever high visibility has to be achieved without harshness. STANDARD WARMTONE (Warm white), having the highest efficiency of all white lamps, will continue in popularity for preserving natural appearances in home, business and factory.

Remember, all four lamps have all four of Sylvania's famous qualities . . . "Triple-Life" . . . ease of installation . . . freedom from end-darkening . . . and built-in quality. Write for details to Sylvania Electric Products Inc., L-2305, 1740 Broadway, New York 19, N. Y.

SYLVANIA ELECTRIC

FLUORESCENT LAMPS, FIXTURES, SIGN TUBING, WIRING DEVICES; LIGHT BULBS; RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; PHOTOLAMPS; TELEVISION SETS

WEATHER FORECAST ...

fair and warmer
(ANY TIME NOW!)

SALES FORECAST ...

Get set now...for cooling season sales

STOCK AND PUSH SANGAMO TIMERS

ideal for attic, window, and ventilating fan control!

Here's a "natural" for cooling season sales . . . tie in a Sangamo Interval Timer with every attic, window, or ventilating fan sale you make. Sell your customers freedom from the bother of turning units off manually—from the needless expense of letting units run all night—sell them the economical convenience of automatic control!

Easy-to-sell Sangamo Timers are designed and built by experts in automatic time control . . . are fully guaranteed . . . and they're priced right, too!

Catalog No. 1010C gives full information.

Small in Size . . . but BIG in Quality

Sangamo Interval Timers offer high accuracy at low cost. They provide an automatic OFF operation following an elapsed ON interval which is manually preset for each operation. The unusually quiet, low-speed motor operates only after the manual setting has been made. The operating range covers any period from 15 minutes to 12 hours.

The Type T Timer, for wired-in construction, may be either wall or switch box mounted, and is rated at 15 amperes A. C.

Type TJ Portable Timer

Sangamo also offers a portable timer with a 5 foot plug-in cord and built-in receptacle for portable convenience. Type TJ is rated 10 amperes or ½ HP at 120 volts.

SANGAMO
ELECTRIC COMPANY
SPRINGFIELD, ILLINOIS

with GE "trigger-start" ballasts

Here is instant starting for standard fluorescent lamps in residential-type fixtures. And it is accomplished merely by using a unique new ballast. With General Electric's revolutionary "trigger-start" ballast, any standard 20-watt lamp or any standard 32-watt Circline lamp starts with a flick of the switch.

These "trigger-start" ballasts are listed by Underwriters Laboratories, are exceptionally quiet in operation, and have the characteristic dependability that has made G-E ballasts "the brand in biggest demand." G-E ballasts make any fixture a better fixture. So, when you're specifying or buying fluorescent fixtures—or replacement ballasts—insist on General Electric "trigger-start" ballasts. *Apparatus Department, General Electric Company, Schenectady 5, N. Y.*

This label on a fixture carton, or the familiar G-E ballast tag on a fixture, is your assurance of fine ballast performance. Buy—when you see the G-E ballast label or tag.

GENERAL ELECTRIC

NEW Rittenhouse

ALL PURPOSE BELL TRANSFORMER

EXCLUSIVE "QWIK-LOCK" MOUNTING*
DOES THE JOB OF THREE FORMER TRANSFORMERS
AT NO INCREASE IN COST!

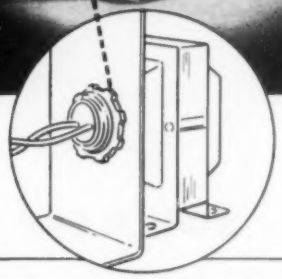
YES, this new Rittenhouse bell-ringing transformer does the job of both outlet box and conventional types—and does it better. This new method of mounting is so simple, so positive, so easy to use, you will wonder why it hasn't been done before. Consider these features:

- Mounts anywhere—on round or square outlet boxes—on side of switch and fuse cabinets, or plain surface.
- Mounts quickly, easily and securely—no extra plates or brackets necessary—no special parts to lose—no small screws to adjust in awkward places.
- Extremely compact and rugged—affords neat-appearing installation for either box or surface mounting.

All these features, plus many others never before offered in a bell transformer . . . *Extra capacity* to operate 10-volt chimes, as well as bells, buzzers, etc. . . . *Attractively packaged* . . . special, new *Utility Green finish* . . . Underwriters' approved . . . *10-Year Guarantee* against burn-out . . . All this, yet costs no more than other leading brands of bell transformers.

→ Get all the facts. Send for transformer catalog and price list.

*U. S. patent pending



MOUNTS ANYWHERE

Built-in nipple fits standard ½" knockout. Integral mounting feet for surface installation.

On side of switch or fuse cabinet.

On round or square outlet box.

Open mounting on wall or ceiling surface.

When you think of entrance signalling —for home or office— think of Rittenhouse

The finest in transformers, door chimes, and signalling equipment.

THE RITTENHOUSE COMPANY, INC.

450 OWEN STREET, HONEOYE FALLS, N. Y.

DOOR CHIMES • BELL AND SIGNALLING TRANSFORMERS • ELECTRICAL PRODUCTS

WHEN YOU SELL

YOU KEEP YOUR CUSTOMERS HAPPY!

Electrical contractors like Security Friction Tape. They like it because it's *safe*—because it *stands up perfectly on the toughest jobs.*

This electrical and general purpose tape has no pinholes—does not unravel when unwound from the roll—tears straight. It has high tensile strength and is highly di-electric. Furthermore—it has a strong, rubbery adhesive that really sticks and holds.

How is your stock of Security?

A QUALITY PRODUCT OF

U.S. RUBBER
SERVING THROUGH SCIENCE

UNITED STATES RUBBER COMPANY

MECHANICAL GOODS DIVISION • ROCKEFELLER CENTER, NEW YORK 20, N. Y.

TIMES and TRENDS

Go To The Convention

It was trust-busting President "Teddy" Roosevelt who once said "Every man owes some of his time to the advancement of the profession in which he is engaged."

That was in the swaddling-cloth days of commercial and industrial association activities. If "Teddy" lived today he would probably prefix that sentence with the words "TO SURVIVE" because in modern business only the laggards feel that they can afford to paddle their own canoe without the benefit of constructive and helpful association activities.

The program of the 42nd annual convention of the National Association of Electrical Distributors to be held at Convention Hall, Atlantic City, N. J., June 12th to 16th, 1950, is one that packs a wallop of valuable knowledge and information in every session. Handling and selling of apparatus, supplies and appliances will be discussed from many angles and in the light of today's highly competitive and difficult operating conditions.

For example, no wholesale distributor can afford to miss the Tuesday morning session, which features an impressive presentation entitled "Better Marketing of Lighting Equipment By Distributors." The General Sessions on Wednesday offer programs that are truly of general interest to all who are involved in the manufacture and sale of electrical products. A review of the last 50 years in that field and a forecast for the next 50 years being featured at the morning session.

Everyone who attends that Atlantic City convention will come away with a new feeling of pride in his business and with many valuable and useful ideas for improving his selling and internal operating efficiency.

Don't miss that Atlantic City Convention.

★

Making Reds See Red

The 1950 World Motor Vehicle Census, just published by *The American Automobile* shows that United States men and women owned more than three times as many passenger cars and more than twice as many trucks, as all the people in all the rest of the world combined. Putting it another way, the 150 million people of the United States scored as above quoted against the remaining 2,150 million souls living elsewhere—including Russia. And yet—there are people, while enjoying all the freedoms of this great nation, use those very privileges to hide behind, while they preach the Stalin philosophy to the unthinking.

★

Television vs Movies

No less an authority than Samuel Goldwyn, tagged by the New York Times Magazine as "Hollywood's best known independent producer" states in that magazine, that by 1951 the investment of the public, the manufacturers and the broadcasters in television—will exceed the total of $2½ to 3 billion now invested in the entire motion picture industry—including everything from studios in Hollywood to the 19,000 motion picture theatres throughout the country.

He predicts that "for many years thereafter, the annual expenditures by the public for television sets is expected to run from 50 to 100 percent of the $1½ billion a year which is currently spent by the American public at the motion picture box office."

Another serious accident on the highway (of business) for which a teen-age youngster is to blame.

★

Angles On Business Outlook

A few months back the forecasts for 1950, then in the news, showed amazing uniformity in predicting continued good business for the first quarter, generally similar expectations for the second quarter, but as far as the second half of 1950 was concerned there was wide divergence of opinion with the gloom artists tipping the scale for a sloughing off in general conditions.

Well—the first quarter has passed, piling up quite

NOW National Electric

New

FROSTY FINISH

CANVAS-BACK LOOMWIRE

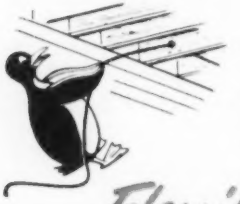
... No hot-weather tackiness!

"Cool!"

The new *"Frosty Finish"* has a cool, smooth, hard feel. Doesn't get soft or tacky.

Clean!

"Frosty Finish" Loomwire will not stick to your hands.



Slick!

The *"Frosty Finish"* won't "dust" or flake off when you pull the cable overhead.

Flexible!

Tests show that in temperatures as high as 125° F. the coiled wire does not stick together . . . pulls from the carton freely . . . is easy to fish.

SOLD THROUGH LEADING ELECTRICAL WHOLESALERS.

At last, a non-metallic sheathed cable that meets every "ease-of-handling" requirement . . . can be stored in warm locations or handled in hot weather without becoming tacky... maintains all the moisture- and flame-resistant qualities of the original NE Canvas Back Loomwire.

LISTED BY UNDERWRITERS' LABORATORIES, INC.

EVERYTHING IN WIRING POINTS TO

National Electric
PRODUCTS CORPORATION
1402 CHAMBER OF COMMERCE BLDG., PITTSBURGH 19, PA.

a few new and impressive records. The second quarter is rolling along at great guns and so we find today quite a few of the crystal gazers willing to allow that the rest of the year should be good, with 1950 piling up a general volume of business not far behind the 1949 total.

Factors cited to support that cheerful view are: Continued high rate of construction, of consumer buying, of output in industrial production, of expenditures for plants and equipment, of agricultural income.

With it all—its still a good healthy buyer's market for the hard hitting sellers but—as usual—a cryer's market for the loafers.

★

Hotel Business

Hotel Business is dropping off, reports *Business Week*. Occupancy reported by Horwath & Horwath, hotel accountants, for January 1950, was 80 percent, as compared with 83 percent a year ago and 90 percent in January, 1947.

Looks as if there is a good chance for seeing before long room clerks once more greet guests with a smile even when they have no confirmed reservation. But the memories of registering in at 9:00 a.m. after long waiting in single file, and maybe getting a room assigned by 7:00 p.m., or 10:00 p.m., or midnight or—not at all, will linger long in the minds of the suffering patrons who were forced to take whatever his Lordship the room clerk condescended to decree.

★

Lighting Fixture Suicide

As long as we have known the electrical industry, the residential lighting fixture industry has been held up as a problem child and one in which price chaos was the accepted thing. The best informed men in the field have admitted frankly that there is just nothing you can do about it.

Today we are in the very heart of the greatest residential building boom that the country has ever seen. Houses are sold readily for approximately double the price that houses of similar cubic footage and general characteristics would have brought before World War II.

The much older and not-at-all merchandising minded plumbing industry draws several hundred dollars as its share of the cost of each housing unit. Kitchen cabinets, utilities, gadgets, and other recent arrivals in the way of "dressing up" the piano box-houses get a good slice out of the cost. One large Eastern builder even installs a television set. (Complete cost of the house under $10,000.)

What do lighting fixture manufacturers do? Well after having seen some pretty low prices quoted on "fixtures" for large housing projects we saw recently what we hope will prove to be the all-time low sub-sub-cellar price. One manufacturer offered to supply 6 lighting fixtures each for 1,000 units—6,000 fixtures in all—at less than $7.00 per unit and another manufacturer took the business at $6.00 per unit or one dollar per fixture.

There ought to be a law. . .

★

Doorknob Austerity

While British socialization of industry may not have reached the doorknob stage the Austerity Program evidently has.

According to an A.P. dispatch families living in a housing development built under the direction of the Ministry of Health have petitioned Health Minister Bevin of the Laborite Government for permission "to affix handles, knobs or other devices" to these doors of their homes. To cut costs, the doors were fitted only with hand latches. Probably the kind of which the string is always out.

O. Fred. Rost

EDITOR

Afterthought

ARE YOU AN ACTIVE MEMBER?

Are you an active Member—
The kind that would be missed,
Or are you just contented
That your name is on the list?

Do you attend the meetings
And mingle with the flock,
Or do you snugly stay at home
To criticise and knock?

Do you enjoy an active part
To help the work along,
Or are you proudly satisfied
To say that you belong?

Are you a member booster
Or just one with a kick,
Who leaves the work to just a few
And talks about the clique?

Oh think this over, MEMBER,
You know the right from wrong,
Are you an active member—
OR DO YOU JUST BELONG?

(Anonymous)

now

Honeywell *Comfort* Thermostats with magic

TM*

Crowning 65 years of development

TM now provides *Thermostat Magic* on all Honeywell *Comfort* Thermostats

Yes, the magic of TM is provided on the entire line of Honeywell Comfort Thermostats... at no increase in cost. Home owners will appreciate this new standard of comfort, the velvet smooth flow of natural warmth... all provided by the magic of TM. Home owners want the best... for greater comfort. Home owners want Thermostat Magic! For more sales, more profit, sell and stock Honeywell TM Comfort Thermostats.

*TM means *Thermostat Magic*

TM *Tested and Approved*

300,000 TM thermostats now in use—many for three heating seasons—have demonstrated the comfort advantages of the Honeywell TM principle. Home owners are enjoying a new standard of heating comfort—made possible by Honeywell scientific research.

TM *Meters the Heat*

Controlled frequency of burner operation provides an even flow of heat under all conditions. Thermostat Magic means more than thermostat accuracy—it means maximum heating comfort and efficiency—at no increase in heating cost.

TM *Thermostat Magic means:*

No More Waiting for Heat

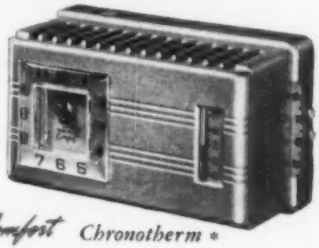
No More Chilly Floors

No More Overheating

No More Fuel Used—instead

More Comfort For Your Heating Dollar

TM *means* Thermostat Magic *at no increase in heating cost!*



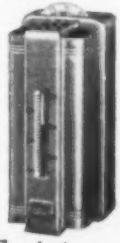
TM *Comfort* *Chronotherm* *

The well-known electric clock thermostat—automatically provides lowered night temperatures and morning pick-up. NOW better than ever with the Thermostat Magic of TM.

**Available in a few weeks.*

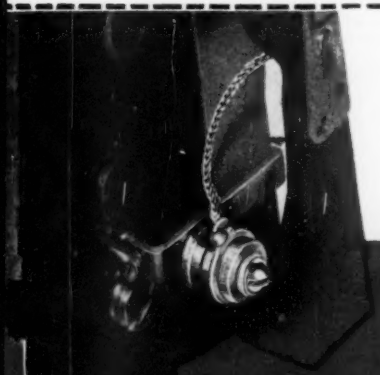
TM *Comfort* *Time-O-Stat*

For lowered night temperatures. Set the dial for the morning pick up time you select—wake up in a comfortably warm house. The Time-O-Stat now assures pin point control through the Thermostat Magic of TM.



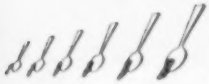
TM *Comfort* *Acratherm*

The finest thermostat of its type in the world. Featuring the easy-to-read dial adjustment, precision control—and NOW, Thermostat Magic with Honeywell TM.



The heating element that means Thermostat Magic

TM keeps the heat coming in regulated portions



TM furnishes the required heat by properly regulating the length of burner operations in accordance with outside weather conditions—longer in cold and shorter in mild weather. Comfort always!

Long and irregular burner operations permit up and down temperatures—allow rooms to get too hot or too cold for comfort. The varying temperatures cause sensations of drafts and chills. Discomfort!

MINNEAPOLIS

Honeywell

FIRST IN CONTROLS

DURABLE • DEPENDABLE

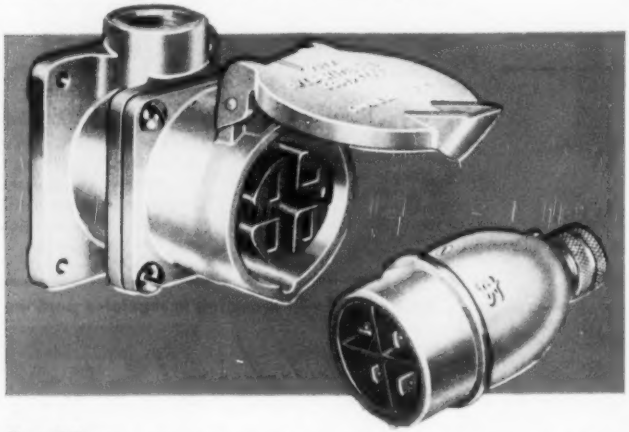
PYLE-NATIONAL

Heavy Duty Plugs and Receptacles

1, 2, 3, 4, 6, 8 pole interchangeable contact units

FOR PORTABLE ELECTRICAL EQUIPMENT

Pyle-National plugs and receptacles are built to withstand the most severe operating conditions, as proven by years of remarkably dependable service in a wide variety of industrial applications. The many substantial construction features of this extensive line of plugs and receptacles and the high quality of materials and workmanship insure safe operation, uninterrupted service and long life.



QuelArc • ***Circuit Breaking Series*** **Unique partitioned insulation provides long insulated paths through air and across surfaces for exceptional protection in these current rupturing devices. Galvanized cast metal housings, bakelite insulation and individually renewable contacts insure long service life. Ratings 20, 30, 60, 100 and 200 amperes, 250 volts DC, 600 volts AC—2, 3, and 4 pole—grounded through shell or extra pole. Threaded cap, plain and hinged spring door housing styles are available.**

Triploc ***and Multiple-Circuit Series*** **A line of exceptional versatility, unequalled in the heavy duty field, with a virtually unlimited number of assembly combinations for varied applications. Offers a selection of 1, 2, 3, 4, 6 and 8 pole contact units which are interchangeable and reversible in any single set of housings. Many types of single housings available of pressed steel with automatic lock and of cast metal threaded for watertight gasket seal. Multi-Circuit housings—2, 3 and 4 gang—available for combinations up to 32 poles. Ratings 15 and 20 amperes, 250 volts DC, 460 volts AC—circuit breaking. Pressed steel fusible and fuseless plugs measure 1 15/16" outside diameter.**

Midget Triploc ***Series*** **Same construction features as Triploc except for much smaller outside diameter of plug shell—only 1¼". Interchangeable and reversible contact units—2, 3 and 4 pole—are of the flat blade type. Rated 10 amperes, 250 volts; 15 amperes, 125 volts.**

2-Gang Receptacle

Fusible Plug

Fuseless Plug

General Purpose ***Series*** **Available with cast metal housings in many types for circuit breaking and disconnect service. 30 amperes, 125 volts DC, 250 volt AC—1, 2, 3, 4, 5 and 6 pole. 60 amperes, 250 and 600 volts—3, 4 and 5 pole. 100 ampere, 250 and 600 volts—2, 3 and 4 pole. Also many special types, fusible and fuseless, for varied applications.**

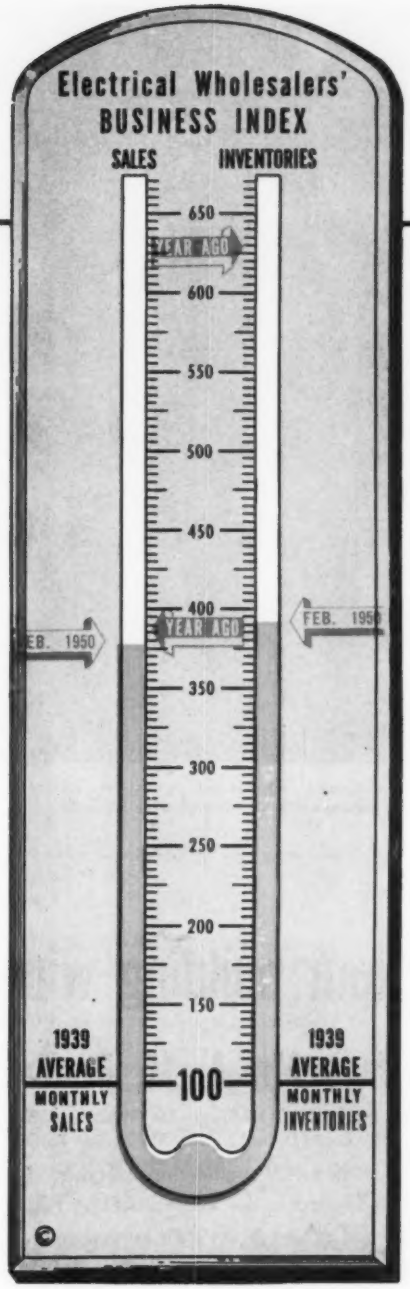
THE PYLE-NATIONAL COMPANY

1352 NORTH KOSTNER AVENUE, CHICAGO 51, ILLINOIS

DISTRICT OFFICES and REPRESENTATIVES in Principal Cities of the United States

EXPORT DEPARTMENT: International Railway Supply Co., 30 Church St., New York • CANADIAN AGENT: The Holden Co., Ltd., Montreal

CONDUIT FITTINGS • FLOODLIGHTS • TURBO-GENERATORS • LOCOMOTIVE HEADLIGHTS • MULTI-VENT AIR DISTRIBUTION



ELECTRICAL WHOLESALING
THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION
A McGraw-Hill Publication

Electrical Wholesale Distribution

For the Month of February 1950

SALES February sales of electrical goods wholesalers, all classes combined, registered a better than seasonal increase of 19 percent over the previous month. Sales were also up 4 percent over February, 1949, the first gain over a year ago noted in the past twelve months.

By class of house, full-line wholesalers indicated an increase of 16 percent over the previous month; wiring supplies and construction materials distributors reported an increase of one percent over January, 1950; appliances and specialties wholesalers showed a 37 percent increase over the previous month.

Compared with the same month one year ago, full-line wholesalers showed no change; wiring supplies and construction materials distributors reported sales off 11 percent; appliances and specialties wholesalers reported a substantial increase of 33 percent.

Reports covering February operations of 680 firms with total sales of $121,440,000 were used in developing this data.

INVENTORIES Inventories of electrical goods wholesalers at the end of February rose 3 percent above the January 31 level but were 33 percent below the dollar value of stocks on hand a year ago.

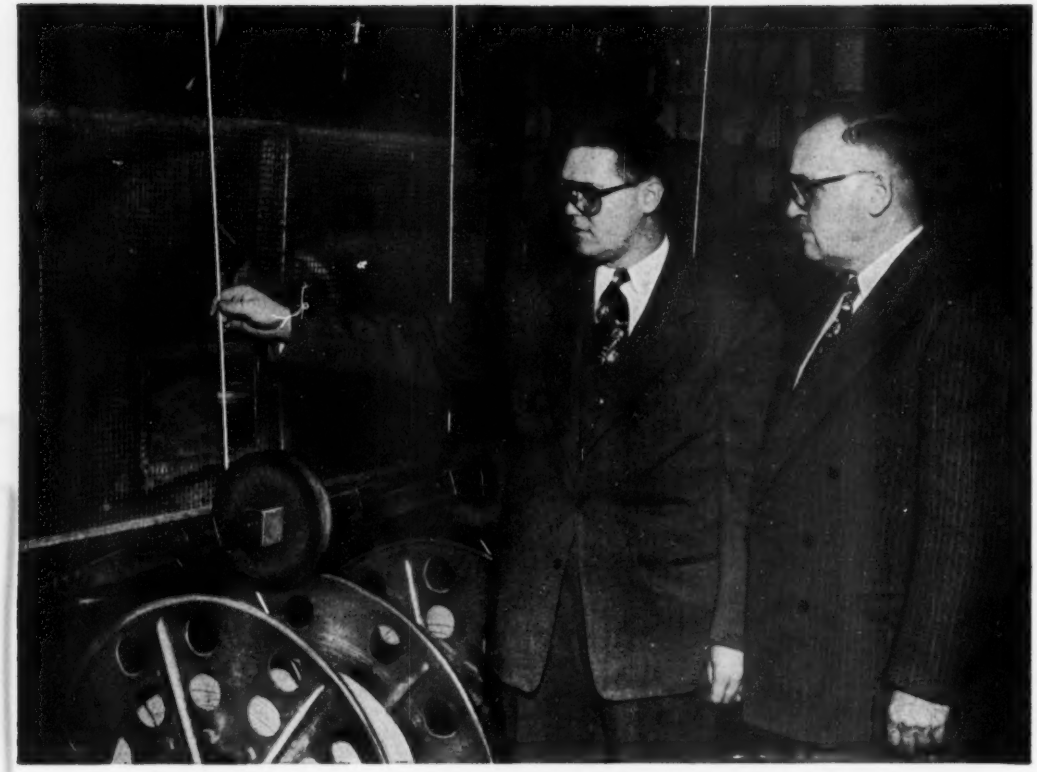
Compared with last month, inventories were reported as up 3, 2 and 4 percent by full-line wholesalers, wiring supplies and construction materials distributors and appliances and specialties wholesalers respectively.

On the other hand, compared with the same month one year ago, inventories were lower by 35 percent for full-line wholesalers; 13 percent for wiring supplies and construction materials distributors and 24 percent for appliances and specialties wholesalers.

At the current rate of sales, February inventories represented approximately 42 days' supply compared with 53 days' supply at the end of January, 1950.

The position of these monthly index indicators, is determined by tabulation of hundreds of reports from an *identical* group of wholesale distributors, located throughout the U. S. who furnish reports regularly. The figures are compiled for ELECTRICAL WHOLESALING by the Bureau of the Census of the U. S. Department of Commerce. The National and Regional analyses which follow include the reports from a much larger but less regularly reporting group, and the percentages arrived at do not always check exactly with the index position.

The Editor



Mr. A. M. Reeder (left), Purchasing Agent, Tristate Electrical Supply Company, Baltimore, Md., on a tour of the Roebling Buckthorn plant with Mr. J. L. Unsworth, Manager of Roebling's Philadelphia Branch office.

"It's only natural that your building wire sales are climbing," says Mr. A. M. Reeder

ROEBLING BUILDING WIRE sales are on the up and up the country over, and a visit to the Roebling plants quickly shows why. Special techniques and machines, plus painstaking care in every manufacturing step, combine to assure quality products of unsurpassed dependability. Pictured above, a precision machine is paper-wrapping wire for Roebx Non-Metallic Sheathed Cable.

The same sort of engineering and production skill is applied to the whole Roebling line of wires and cables. From their copper conductors drawn in Roebling's own mill to their protective coverings, they are the finest products that you can sell...and they're priced to assure you real profits in a competitive market. In addition, Roebling advertising and prompt warehouse service are invaluable business builders.

ROEBLING BELIEVES in advertising, and maintains a big advertising program that is directed to every one of your customers and prospects. All of them see full page advertisements, in color, in the trade papers, and read about the *extra* value and economy of Roebling wire and cable. Another series of advertisements, in *Fortune*, *Newsweek* and *Business Week* reaches business owners and executives and helps increase the demand for Roebling quality products.

THE ROEBLING LINE includes more than 60 types of electrical wires and cables, in a wide range of sizes, constructions and standard insulations:

- Bare Copper Wires and Strands
- Weatherproof Wires and Cables
- Magnet Wire
- Building Wires and Cables
- Service Entrance and Drop Cables
- Flexible Cords
- ROEPRENE Mining and Mining Machine Cables
- ROECLAD Portable Power Cables
- ROEWELD Welding Cables
- Rubber and Snythetic Power Cables
- V. C. Wires and Cables
- Parkway Cables

ROEBLING WAREHOUSES are located at important points throughout the country, so that every wholesaler can be served in the shortest possible time—a big help in satisfying customers!

Visit Roebling's convention headquarters
Conference Booth #76
NATIONAL ASS'N OF ELECTRICAL DISTRIBUTORS
or Suite 108-109, Claridge Hotel, Atlantic City
JUNE 11-16, 1950

FOR ELECTRICAL WIRES AND CABLES... *Today it's Roebling!*

JOHN A. ROEBLING'S SONS COMPANY, TRENTON 2, N. J.

ROEBLING A CENTURY OF CONFIDENCE

Atlanta, 934 Avon Ave. ★ *Boston*, 51 Sleeper St. ★ *Chicago*, 5525 W. Roosevelt Road ★ *Cincinnati*, 3253 Fredonia Ave. ★ *Cleveland*, 701 St. Clair Ave., N. E. ★ *Denver*, 4801 Jackson St. ★ *Houston*, 6216 Navigation Blvd. ★ *Los Angeles*, 216 S. Alameda St. ★ *New York*, 19 Rector St. ★ *Philadelphia*, 12 S. Twelfth St. ★ *Portland*, 1032 N. W. 14th Ave. ★ *San Francisco*, 1740 Seventeenth St. ★ *Seattle*, 900 First Ave. S.

Electrical Wholesale Distribution

REGIONAL ANALYSIS

BY REGIONS, compared with January, 1950, all classes of houses combined reported increases in sales throughout the country for the month of February. Increases ranged from 6 percent in New England to 35 percent in the East South Central region.

Compared with the same month a year ago, sales increases were reported in all but two regions. New England registered the largest gain with sales 15 percent above a year ago.

Inventories, on a regional basis, closely followed the national average with the East South Central reporting the largest increase, 11 percent, compared with the previous month. All other regions showed increases of from 1 to 6 percent compared with January, 1950.

Days' supply of inventory at current rate of sales ranged from a low of 35 days in the Middle Atlantic region to a high of 49 days' supply in the Mountain Area.

FEBRUARY, 1950

Figures in this table apply to the geographic divisions as outlined and numbered in white on map above.

SALES February 1950 Compared in % with		Trading Region (See Map)	INVENTORIES February 1950 Compared in % with	
Jan. 1950	Feb. 1949		Jan. 1950	Feb. 1949
+ 6	+15	1	+ 6	—38
+24	+ 3	2	+ 1	—36
+13	+ 3	3	+ 3	—32
+22	— 6	4	+ 4	—33
+26	+ 6	5	+ 3	—32
+35	+ 8	6	+11	—21
+23	— 6	7	— 2	—35
+17	+ 6	8	+ 6	—21
+14	+13	9	+ 1	—36

STATES COMPRISING GEOGRAPHIC DIVISIONS: REGION 1—Maine, N. Hamp., Vt., Mass., R. I., Conn.; REGION 2—N. Y., N. J., Penn.; REGION 3—Ohio, Ind., Ill., Mich., Wis.; REGION 4—Minn., Iowa, Mo., N. Dak., S. Dak., Nebr., Kans.; REGION 5—Del., Md., D. of C., Va., W. Va., N. C., S. C., Ga., Fla.; REGION 6—Ky., Tenn., Ala., Miss.; REGION 7—Ark., La., Okla., Tex.; REGION 8—Mont., Idaho, Wyo., Colo., N. Mex., Ariz., Utah, Nev.; REGION 9—Wash., Ore., Calif.

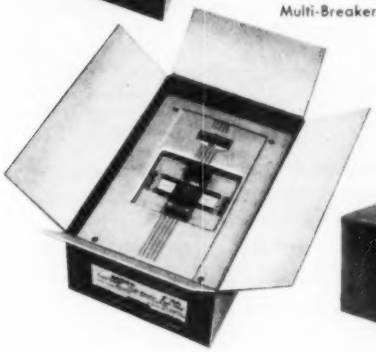
THE CUTLER-HAMMER Flexible Merchandising Package ON M08 MULTI-BREAKERS

1 Remove carton containing basic device from shelf.

2 Open carton and remove filler.

3 Insert Ad-Ons in space thus provided.

4 Add cover to Multi-Breaker.



5 Resealed carton now contains M08 Multi-Breaker tailored to the job.

For prompt off-the-shelf meeting of all job requirements from modest stocks

A unique and exclusive Cutler-Hammer merchandising arrangement cuts down inventory requirements, handling operations and record-keeping, while meeting *all* M08 Multi-Breaker job requirements from this modest stock. The fundamental of this plan is simple stocking, simple assembly, simple handling. The basic Cutler-Hammer M08 Multi-Breaker device, a 4-circuit block mounted in a box with neutral and handle ties, is packaged in its own carton. So are Ad-On Breakers and Multi-Breaker covers of both surface and flush types packaged individually. The basic unit meets minimum requirements for most applications. But its carton is so constructed it will receive any Ad-On Breakers which may be required to adapt the basic unit to the specific requirements of the individual job . . . and the carton will also receive the required cover, flush or surface type. See photos at left. Handling, record-keeping, need to recheck constantly, possibility of loss are reduced if not eliminated. You will like this system. CUTLER-HAMMER, Inc., 1327 St. Paul Avenue, Milwaukee 1, Wisconsin.

CUTLER-HAMMER
MULTI-BREAKER
C-H

There is NO SUCH THING as an "RLM TYPE" Lighting Unit!

Either it is RLM CERTIFIED or it is NOT.
The Only Way To Be Sure Is To

SEE the RLM LABEL!

Looks can be deceiving in lighting units, too! A lighting unit may LOOK like an RLM Unit, it may have a similar outward appearance, contour, shielding angle, etc.—but unless it is made in accordance with RLM Standard Specifications and carries the RLM Label, it is *not* an RLM Lighting Unit. There is no such thing as an "RLM Type" that does not have the label.

Why No "RLM TYPE"? The RLM Label on fluorescent and incandescent lighting units, not only assures the buyer of design and construction that meets certain minimum standards*, but also provides him with a WARRANTY of UNIFORM QUALITY.

Only those products of lighting manufacturers which are *consistently proved* to be of *uniform quality* and meet the published specifications of the Institute are permitted to bear the RLM Label. This uniformity of quality is of exceptional importance to all those who buy, use, specify, recommend or sell lighting equipment. It is essential to uniformly satisfactory lighting equipment performance, that each unit in the system perform with equal efficiency to the other . . . that ballasts function with uniform efficiency . . . that the reflection factor be uniform from unit to unit . . . that the units be of uniformly durable construction with the identical-gauge steel and the same thickness Porcelain Enamel. Such uniformity reduces to a minimum the plague of spotty performance by individual units in a lighting system.

How RLM Checks Uniformity of Quality

According to the RLM testing and inspection procedures, representatives of the Electrical Testing Laboratories periodically visit plants of all RLM member-manufacturers. They take lighting units right off the assembly lines and out of stock for testing and inspection at their laboratories. They may also obtain test samples directly from the distributors' shelves or out of contractors' stocks in order to check Uniform Quality at every level of distribution.

This activity of the RLM Standards Institute, which makes possible the Warranty of Uniform Quality, is not duplicated by any other agency in the lighting industry. That is why there is no such thing as an "RLM Type" Lighting Unit.

FREE SPECIFICATIONS BOOKLET! This up-to-date 36-page booklet tells why it is important to SEE THE RLM LABEL before buying or specifying lighting units. It contains all RLM Specifications, covering vital construction and performance factors that should have major consideration by the buyers and specifiers. It is an indispensable help in the sale of industrial lighting units. For your complimentary copy (or copies), sent without obligation, write:

RLM Standards Institute,
Suite 817, 326 West Madison St., Chicago 6, Illinois.

This Advertisement is published in the Interest of the Entire Lighting Industry by

RLM STANDARDS INSTITUTE
INCORPORATED

The letters RLM stand for Reflector and Lighting Equipment Manufacturers

*Every RLM Unit Must Conform with Certain Minimum Standards such as these:

Porcelain Enamel Reflectors – all RLM Units must have a specified thickness of Genuine Porcelain Enamel fused to steel. This unsurpassed high-reflection, high-diffusion reflecting surface is the only commercially available finish that cannot deteriorate or corrode. Simple soap and water cleaning quickly restores it to original efficiency.

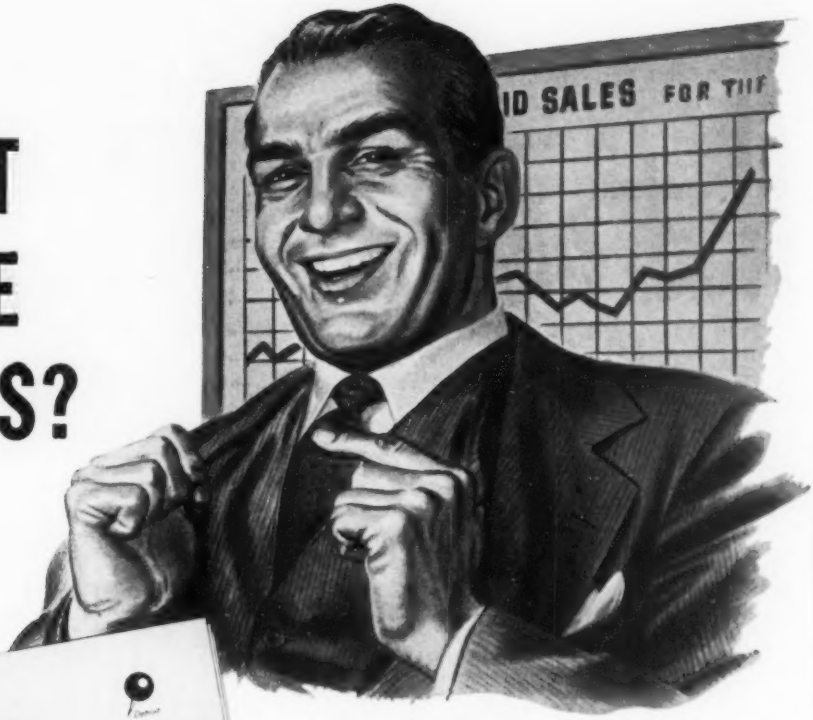
High-Quality Ballasts – RLM Fluorescent Units must be equipped with Certified Ballasts which prevent high-temperature ballast operations, supply proper starting current and maintain proper operating watts to the lamp. Because of their high power factor, present wiring capacity can be utilized most efficiently.

Reflector Design – every RLM Unit must conform with the most accepted principles of Illuminating Engineering. Such design protects the workers' eyes while delivering, not only the most light per dollar, but also the required quality of light for the individual seeing task.

Sound Construction – RLM Units must comply with high fabrication and materials to insure standards of maximum resistance to sag, distortion and breakage.

R-4667

WANT MORE SALES?



Here's a book that shows how other firms GET MORE SALES

Plenty of smart sales managers *are* bringing in more business even in today's tough markets—and this 26-page illustrated booklet shows you how they do it.

In a word, they're the ones who run their business on *facts*...not on guesswork. To that end, they make full use of the simplest and best equipment to keep those facts constantly before them, in concise and usable form that concentrates action on the points where action pays off. We think when you see it you'll agree that this new booklet shares generously the ripest, most profit-making experience sales-wise that is currently obtainable anywhere.

In short, here's a book you will *use*. Send the coupon today, and be one of the first to get your copy.

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Next month!

Revolutionary development that will

ROCK the INDUSTRY

FEDERAL NOARK

Federal Electric Products Company, 50 Paris Street, Newark 5, N. J.

ELECTRICAL WHOLESALING News

Record Attendance Now Assured For NAED Atlantic City Meet

Lighting market development, radio-television distribution, apparatus and supplies selling, merchandising housewares among featured topics, with conference booths and warehousing exhibits between-meetings attractions

NEW YORK—Members and guests of the National Association of Electrical Distributors will hear Charles E. Wilson, president of the General Electric Co., deliver the opening address at the Apparatus and Supply Division meeting on June 12 at the beginning of the week-long 42nd Annual Convention of the National Association of Electrical Distributors at the Convention Hall, Atlantic City.

This auspicious beginning will be a highlight in what will undoubtedly be one of the best attended and most constructive convention programs in the long history of this association. It is expected that attendance will reach a record peak of 2500 or more members and guests.

In accordance with established practice, the convention will be divided into two separate conventions of the Apparatus and Supply and the Appliance Divisions, with a general session scheduled for mid-week on Wednesday, June 14.

Features of the Apparatus and Supply Division meetings on June 12 and 13 will be addresses by R. Stafford Edwards, president, Edwards and Company, Inc., and N. J. MacDonald, vice president, The Thomas & Betts Co., Inc. Both of these prominent industry speakers will be heard on June 13 and their talks will provide their audiences with a down-to-earth analysis, from different viewpoints, of the broad subject of electrical distribution. While in no sense a "debate" this special program feature should be thought-provoking and stimulate a great deal of constructive thinking throughout the industry.

Also featured as a guest speaker at the A & S meeting will be Dr. Edward F. Willett of the Department of Economics of Smith College, whose subject will be "Private Enterprise at the Crossroads."

An entertaining and distinct approach to better marketing of lighting by distributors will be presented on the morning of June 13 under the auspices of the Industrial and Commercial Lighting Equipment Section of NEMA. This feature promises to be one of the most unusual ever offered on an NAED convention program as it will employ a professional cast of actors under the direction of the internationally known theatrical agency, Sherman Dryer Productions.

S. B. Williams, chairman of the Market Development Committee of the NEMA Section and director of public relations for Sylvania Electric Products, Inc., states that several thousand dollars have been appropriated to develop this special lighting clinic and that the agency producing it has been able to "explain to the public the mysteries of atomic energy and the Einstein principle."

CHARLES E. WILSON, president of General Electric, will address the NAED apparatus and supply conferees.

Next month they will have the reasonably tough assignment of dramatizing how to be successful in the sale of lighting. An attractive informative brochure containing highlights of the production is being prepared for distribution following the presentation at the convention.

Each convention session will provide for a question and answer discussion period. In addition to the NEMA presentation on industrial and commercial lighting, Martin Levine, chairman of the NAED Residential Lighting Committee, will offer a special presentation in connection with his committee's report. Another feature of the A & S meetings will be an illustrated talk on the latest warehousing techniques given by A. J. Parsons, chairman of the Warehousing Committee.

Many of those who attended the association's convention at Chicago four years ago will remember the inspiring and rapid-fire, laugh-provoking speech by Arthur H. "Red" Motley, publisher of *Parade Publications, Inc.* "Red" Motley will again address the general convention session on June 14. His subject will be "Nothing Happens Until Somebody Sells Something."

Featured at this meeting will be a presentation to a representative of a Junior Achievement company of an award for the best electrical product produced under the J. A. program this year. Francis Stern, president, Stern & Company, Inc., Hartford, who is chairman of NAED's Junior Achievement Committee, will make the presentation and also announce the issuance of eight scholarships to J. A. members who intend to enter the electrical industry as a career.

Other features of this session will be an address by president D. M. Salsbury and a report by managing director Chas.

Lasting Protection — Smooth and uniformly hot-dip galvanized inside and outside, Triangle rigid steel conduit is dipped into special lacquer and baked in this endless conveyor equipment.

Your own experience tells you that conduit fails where the galvanizing is thinnest. That's why Triangle's *uniformity* is important to you. For the severest service, where a single pin-point of penetration could open the way to rapid rust and early failure, users upon users repeatedly specify Triangle conduit. That's why you see more and more "Tristeel" flexible steel conduit, more and more Triangle E.M.T. and rigid steel conduit being used throughout refineries, on bridges over salt water, in increasing numbers of industrial plants. Users' own impartial laboratory tests have repeatedly proved the superiority of Triangle—the conduit that's *uniformly* hot-dip galvanized . . . inside and outside . . . and then further protected by an exclusive new lacquer formulation!

Prove to yourself—in your own laboratory, or on your toughest jobs, that Triangle is the conduit you can count on!

The Trade Mark Of Top Value

TRIANGLE CONDUIT & CABLE CO., INC.

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IT *MUST* BE RIGHT!

Catalog No. 300 Gives Full Details Of the Complete Triangle Line

"Glazon" & "Trioseal" Building Wire • "Tricon" Control Wire • "Adaptal" General Purpose Wire • "Triex" Non-Metallic Sheathed Cable • "Trioprene" Trench Cable • Service Entrance, Parkway, Power & Varnished Cambric Cables • "Tristeel" Flexible, Thin Wall & Rigid Steel Conduit

G. Pyle. O. Fred. Rost, editor of ELECTRICAL WHOLESALING, will talk on the subject "Electrical Products Distribution—Yesterday—Today and Tomorrow," a unique feature of his talk being a forecast of what the industry will be in the year 2000. K. B. DeBevoise of NAED counsel will also be heard.

Election of officers and members of the Board of Governors and Executive Committee is scheduled for June 14 and the day's program will be concluded with a cocktail party for members and guests.

The Appliance Division Convention will be held on June 15 and 16. Featured speakers on the first of those days will be J. B. Elliott, vice president in charge of consumer products, RCA Victor Division, who will talk on "The New Radio-Television Distribution Patterns" and G. P. F. Smith, president, Norge Division, Borg-Warner Corp., who will speak on the subject of refrigeration.

On June 16 the principal address will be given by W. E. O'Brien, general sales manager, McGraw Electric Co., Toastmaster Products Division. Mr. O'Brien will talk on the very timely subject of electric housewares.

The Major Appliances Committee will offer a special presentation dealing with market development of new appliances as its report to the Appliance Division.

A skit technique will be employed to highlight several important problems facing the major appliance, radio and television industries. In addition, several interesting resolutions aimed at needed industry improvements will be presented to the convention for adoption.

An innovation at this convention will be a father and son dinner scheduled for June 13 and a dinner for Honorary Life members will be held on June 15—both at the Traymore. Ladies' entertainment activities will be in charge of Miss R. M. Cleary, treasurer of the association.

The Manufacturers' Conference Booth Center will be located in the Convention Hall and, as this issue went to press, it was evident that 200 or more companies would be represented. This feature, it will be remembered, was initiated last year and proved to be a most constructive and welcome addition to the convention program. The number of Manufacturers' Conference Booths at Atlantic City is expected to be approximately twice that of last year.

In addition, the association has arranged an exhibit area for the display of materials handling equipment. It is expected that a cross section of manufacturers in this field will be represented.

Mr. Pyle has advised that the *Saturday Evening Post* will make an important contribution to the success of the convention program by setting up an "information post" where information and other services will be available to everyone attending the convention.

ANNUAL sales meeting of The Hardware & Supply Co., electrical wholesaling firm of Akron, Ohio, was held recently at the Akron City Club. In attendance were 82 persons, including 51 city and country salesmen. Company officers present included: Hesket H. Kuhn, president; Hoyt O. Smith, vice president; E. W. Hartzel, treasurer; Fred H. Steffens, secretary.

ILLUSTRATED talks by lighting specialists from General Electric's Nela Park told the "why" and "how" of the most modern lighting techniques to those persons who attended the recent Planned Lighting Clinic at Elizabeth, N. J., the first of a series of such clinics to be held in eastern United States.

New Regulations Expected To Stimulate Housing

Increased low-cost housing was the object of new amendments which were added to the Housing Act of 1950. Some changes in rules and procedures will be forthcoming from FHA

WASHINGTON—With the signing of the Housing Act of 1950 recently by the President, the Federal Housing Administration renews its long-range housing program under Title II and initiates new programs with respect to insurance of small loan and cooperative housing projects, according to Commissioner Franklin D. Richards.

The amended law, it was pointed out, also authorizes FHA to complete the processing of certain rental housing applications filed with FHA field offices on or before March 1, last, the expiration date of the emergency Title VI, Section 608, legislation.

"Several important fundamental changes have been made in the National Housing Act by the Housing Act of 1950," Commissioner Richards said, "which necessitates the issuance of new rules and regulations governing operations under Titles I, II and VI. These are being printed and will be sent to all FHA field offices

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and interested parties at the earliest possible date."

It was announced that the new amendments are designed to stimulate more housing at lower costs and lower rents and of a more adequate size for family use. It also broadens the provisions of FHA to insure mortgage loans for cooperative housing, according to Commissioner Richards. The provisions of the newly-amended law which Commissioner Richards particularly stressed are as follows:

Title I

There is no major change in the procedure of insuring loans for repair and improvements but certain clarifying amendments to the regulations were necessary to bring operations into line with amendments to the Act. No changes were made with regard to maximum loan amounts or maturities of such loans.

The new Section 8 is termed "one of the most significant features of the bill" in that it provides for a greater volume of new low-priced homes for families of low or moderate income, especially in suburban and outlying areas which have received a disproportionately small share of new housing in the last few years.

Under this new provision FHA may insure a mortgage on a single-family dwelling up to 95 percent of the FHA's appraised value of the property, if the mortgage itself does not exceed $4,750, and if the mortgagor is the owner-occupant of the property; a five percent down payment is required. If the builder constructing the dwelling is the mortgagor the mortgage shall not exceed $4,250, or 85 percent of FHA's appraised value. In addition, the Congressional Conference Report clearly stated that in the appraisal of such properties, "particularly in outlying areas" it is not expected that there will be complete "conformity with many of the requirements essential to the insurance of mortgages on housing in built up areas." The processing of applications under this section will follow the same general procedure as applications under Section 203 of Title II.

Title II

Relative to mortgage insurance on low cost homes, specifically Section 203 (b) (2) (D), the insured mortgage for an owner-occupant can be for as much as $6,650 or 95 percent of FHA's appraised value. The mortgage amount limitation may be increased by $950 for each bedroom in excess of two but not exceeding four. This provision is aimed particularly to encourage production of more housing, at moderate prices, suitable for families with children.

Under Section 207 as amended, relating to insurance of mortgages on multi-structures, discrimination against families with children is prohibited and violation is called a misdemeanor punishable by fine. A mortgage cannot exceed 90 percent of the first $7,000 of value per unit and 60 percent of the next $3,000 with a limitation of $8,100 for each family unit, or $7,200 per family unit if the number of rooms in a project does not average at least 4½ per family unit.

A new section, 213, is added to the National Housing Act, designed to increase materially the assistance given cooperative housing projects. This new section takes the place of the existing provisions of the law with respect to insurance of mortgages of cooperative housing projects now contained in Section 207 of the National Housing Act, as amended. Insured mortgages under this

(*Continued on page 95*)

DAFFYNITIONS

Communism: If you have two cows, you give both to the government; then the government gives you back some milk.

Capitalism: If you have two cows, you sell one cow and buy a bull.

New Dealism: If you have two cows, the government shoots one cow; you milk the other cow, then throw part of the milk down the sink.

Anarchism: If you have two cows, your neighbor shoots one and takes the other.

Realism: If you have two cows, and they're both dry.

To expedite—to confound confusion with commotion.

Expediter—one who does same while riding fast trains and staying at good hotels.

Efficiency expert—a guy who trains expediters.

Coordinator—a guy who has a desk between two expediters.

Criteria—measures which the other guy uses to underestimate what you have already overestimated the deal to be worth.

To activate—to make carbons and add names to the memorandum.

Under consideration—never heard of it.

Under active consideration—we're looking in the files for it.

Modification of policy—a complete reversal which nobody admits.

To spell out—to break big hunks of gobbledygook down into little hunks of gobbledygook.

Note and initial—let's spread the responsibility for this.

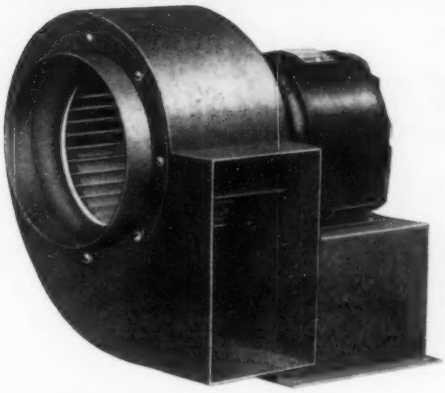
Give us the benefit of your present thinking—we'll listen to what you have to say as long as it doesn't interfere with what we've already decided to do.

Expert—an expert is a person who avoids all the small errors as he sweeps forward to the grand fallacy.

(*Author wisely wishes to remain unknown*)

We're looking for four men
Not to hire—to *please!* At every point in the design and manufacture of our steel switch and outlet boxes we're looking out for the Architect, Contractor, Wholesaler, and Dealer through whose hands they will pass. We make top *quality*, because that's the only safe way. We have built our line into genuine *completeness* because that means economy all along the way. And the Underwriters' Laboratories, Inc., listing tells the world our merchandise is right. We're here to serve you well and we're organized to serve you promptly.
You can always rely on RACO
RACO
ALL-STEEL EQUIPMENT Inc.—800 Kensington Ave., Aurora, Illinois
"A BOX FOR EVERY NEED"

Peerless Electric DIRECT-DRIVE UTILITY BLOWERS



Peerless Utility Blowers are known the country over for dependability. They are widely used for general ventilation and exhaust where duct systems are required, and for wash rooms, boiler rooms, restaurants, or wherever circulation through a limited area is indicated. Compact, easy to mount and quiet in operation, these blowers are designed to deliver large volumes of air at extremely economical cost.

HOUSING AND WHEELS — The arc-welded housings are constructed of 16-gauge steel, with sturdy spot-welded motor bases. Wheels are designed for efficient operation and are dynamically balanced. Heavy cast-iron hubs support the rigid riveted wheels.

MOTORS — Available in all types of current characteristics, to suit all requirements. Single-phase motors are wool-packed, sleeve-bearing, resilient-mounted for quiet operation. Three-phase units, either sleeve or ball bearing, are rigid mounted. Units with single-phase motors are shipped from stock as follows:

Size 0—Permanent split-capacitor type, 115 volt

Sizes 1 and 1¼—Split-phase type, 115/230 volt

Sizes 1½, 1¾ and 2—Capacitor-Induction type, 115/230 volt

BLOWER PERFORMANCE DATA

Model No.	Motor H.P.	Blower RPM	Free Air	⅛"	¼"	⅜"	½"	⅝"	¾"	1"	1¼"	Shipping Weight
0	1/20	1725	184	169	144	112	....	....	....	....	....	20
1	1/20	1180	390	330	280	190	....	....	....	....	....	45
1	⅛	1750	595	560	515	470	420	365	300	....	....	55
1¼	⅛	1150	635	560	480	395	290	....	....	....	....	50
1¼	⅓	1750	965	920	870	815	765	710	655	540	360	57
1½	¼	850	785	700	625	515	....	....	....	....	....	100
1½	⅓	1150	1125	1065	1005	880	830	740	610	....	....	92
1¾	⅓	850	1580	1545	1485	1450	1420	1380	1340	....	....	130
1¾	¾	1150	2085	1955	1890	1815	1795	1685	1580	1275	....	142
2	⅓	690	....	2170	1855	1435	1190	....	....	....	....	200
2	¾	850	....	2485	2390	2215	2005	1820	1630	....	....	220
2	2	1140	....	3620	3444	3275	3080	2825	2690	2385	2260	244

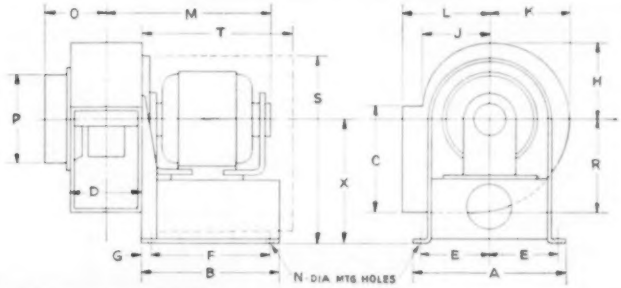
ROTATION AND DISCHARGE — The units are constructed as standard in clockwise rotation but can also be furnished counter-clockwise when so specified. Housings may be turned in any one of eight different ways at time of installation, for any discharge direction desired.

FINISH — The finish is hard baked gray enamel for durability.

CUSTOM FEATURES — Weather-proof covers, available for outside installation, eliminate the need for penthouse or other protection. Inquiries are invited for other special features that may be desired, such as brass wheels, isolation dampeners, or special designs to fit particular applications. Numerous units are being built today for such special requirements.

CAPACITIES — These blowers are tested and rated in accordance with test codes adopted by the National Association of Fan Manufacturers and the American Society of Heating and Ventilating Engineers.

GUARANTEE — Complete units are guaranteed against defective workmanship or material for a period of one year from date of shipment from factory. Every unit shipped is recorded in the name of the purchaser as to all of its features (size, motor, windings, etc.) to benefit you greatly for immediate identification for spare parts, replacement or duplicate requirements.



BLOWER DIMENSIONS

Model No.	Wheel	Bore	A	B	C	D	E	F	G	H	J	L	K	N	M	O	P	R	X	S	T
0	4½ x 2½	½	7½	5½	5⅛	3⅛	3⅛	4½	½	3½	3⅛	4⅛	3¼	5/16	8⅛	2¾	4½	4⅛	5⅛	9	10
1	6 x 3	⅝	9⅛	8	7⅛	4¼	4¼	7	½	4½	4	5	5	⅜	11⅛	3⅝	6	7⅛	9⅛	13	12
1¼	7¼ x 3⅞	⅝	10⅞	8	8¼	5⅛	5	7	½	5⅛	4⅝	6⅞	5⅛	⅝	11¾	4	7½	8	9⅛	13¾	12
1½	9 x 4½	⅝	12⅛	11	10⅛	6⅛	5⅝	10	½	6⅝	5⅝	7⅞	7⅛	⅝	14⅛	4⅝	9	9⅛	10⅝	15⅝	14
1¾	10⅝ x 5¼	¾	14¾	11½	11⅛	7⅛	6⅞	10	¾	7¾	6½	8¾	9	⅝	16⅝	4⅞	11	10⅝	11¼	17¾	16
2	12½ x 6	*	15¼	*	13	10⅛	6½	*	*	9⅛	8⅛	11⅛	9⅞	¾	*	7	12½	12¾	14¾	22¼	20

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* Depends upon Motor used.

THE *Peerless Electric* COMPANY · WARREN, OHIO

NO. SDA 131

Mr. Businessman!

WHAT WILL THE 1950 CENSUS DO FOR YOUR BUSINESS?

CONSUMER MARKET INFORMATION

The 1950 Census will provide a huge amount of information about the characteristics of the consumer market. It will tell you what kind of income groups live where . . . what they have and what they need in the way of commodities from automobiles to television sets down to plumbing fixtures. The Census is an accurate survey of economic conditions in your market area. It will not only tell you *where* your customers are, but *what they need that you have to sell them!*

It will show where improved transportation and shipping facilities are needed . . . better harbors and waterways . . . stepped-up Public Service.

That is why the 1950 United States Census is vital to your business!

COOPERATION

You know that the Census-Taker is not just "counting heads." He's actually making a survey of existing conditions in industry, business, employment, housing, education. *You* know census information is as confidential as the vote you cast! Because you know all these things *you'll* cooperate with the Census-Taker in every way when he calls on you.

WHAT ABOUT THE OTHER FELLOW?

But! What about the people who work for you? The man in the shop . . . your own secretary . . . the fellows in the shipping room. Do they know all this about the Census? Chances are some of them do, so the idea is to get the right information across to those who don't!

WHAT'S THE BEST WAY?

If it's possible, call everyone together and talk about it . . . ask questions . . . exchange ideas. If your outfit is too big for that, direct a Census information memorandum to all your employees. Post information on the bulletin boards. Run a Census story in the company house organ. Talk about it. *Every way you can . . . get the people who work for you to cooperate with the Census.*

WHAT DOES THE 1950 CENSUS MEAN TO YOUR EMPLOYEES?

Better schools . . . school buses . . . school lunches. It means finer roads, bridges and highways . . . increased transportation facilities . . . improved safety regulations. It creates more efficient Public Service and furthers adequate distribution of utility services such as telephones, gas, water and electric power. It will help your community plan better parks, playgrounds, recreation areas and housing. It will mean higher living standards and accurate congressional representation. The Census is *everybody's voice in America's future!*

YOU OWE IT TO YOURSELF . . .

Mister Businessman . . . to your business and your community! Put your efforts behind the 1950 United States Census for an even better country to live in . . . the *best* country to do business in!

HELPING THE CENSUS HELPS UNCLE SAM ★ ★ MAKE SURE YOU COUNT IN AMERICA'S FUTURE
1950 CENSUS

A PUBLIC SERVICE PROJECT THE ADVERTISING COUNCIL

Published in the public interest by:

McGRAW-HILL PUBLICATIONS

GREATEST DAY in the life of the farmer is the day electricity arrives—making it possible for him to enjoy all the comforts and conveniences of electrical living plus the efficiency and cost-savings that it introduces to his farm operations.

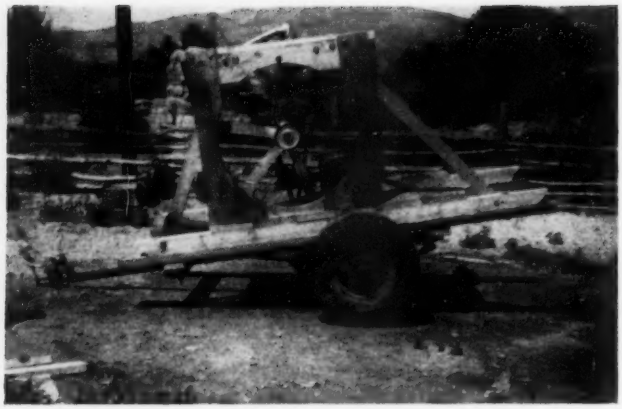
Sell Electrical Farm Mechanization While Farmers Cash Income Bulges

Continued high level prices on farm products—crops and live stock—plus government parity payments guarantee continued high-level cash income to farmers, make selling electrical modernization and mechanization of farm life and work profitable for the salesman with the right know-how

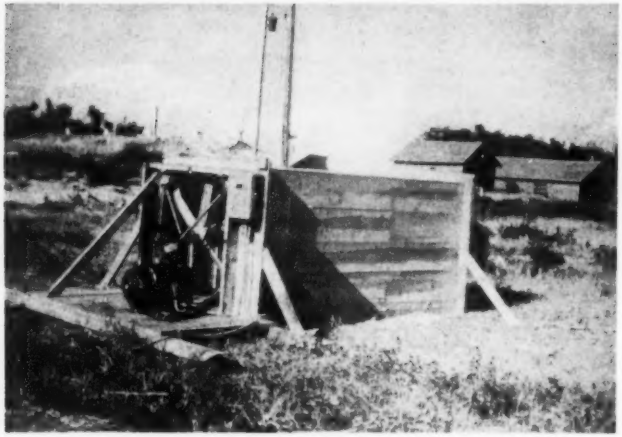
By Arthur W. Hooper

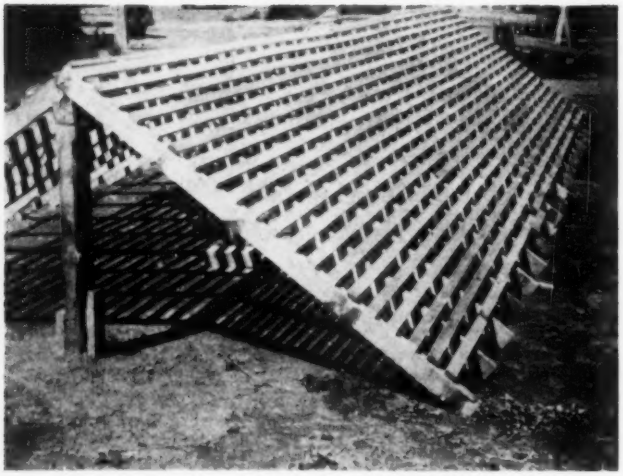
FARMING pays bigger dividends when it puts electricity to work and by the same token selling electrical equipment to the farm market pays bigger dividends to the salesman who acquires the necessary know-how. Ten years ago a bare 30 percent of America's farms had electric service whereas today more than 85 percent are wired for electricity.

It did not take much selling to convince the farmer that he needed electricity. The wonderful benefits of electric lights, washing machines, running water, refrigerators, radios and other comforts were more than enough to make the "day we got electricity" a major event in the



OF ALL THE MANY USES for electrical equipment on the farm, drying hay by using a duct system and blower appears to have captured completely the farmer's interest—and for good reason. Hay must be dried or cured before it is stored in the barn, and during the curing period it is subject to all the dangers of damage from dew, rain and excessive sun bleaching. By means of fan forced air the farmer can partially cure hay in the fields and complete the drying by forcing air through it after it is stored in the mow. Latest application of this method (see photos at left) allows the farmer to cure the hay right in the fields by using portable blowers and simple slatted rack construction. REA photos.



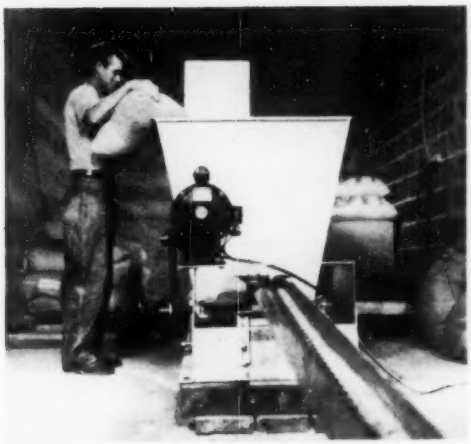


farmer's home life.

However, most farmers are only just beginning to become aware of the great possibilities offered by electricity for lowering costs and increasing production. Where formerly they desired electric service for the comforts and conveniences that it would provide, today, farmers recognize the labor-saving and time-saving advantages of electrically-powered farm production equipment.

In considering the big tasks on the farm, electrification can bring increased production, saving of

BELOW—Farmers should be made to understand the necessity for providing for future use. When they hitch more and more machinery to volts the rise in "load" will go up steeply. Westinghouse photo.



FILLING the hopper of an automatic poultry feeder takes the farmer only a few minutes. G. E. photo.

ELEVATOR at the end of an electric barn cleaner filling a spreader allows the farmer to save many hours. G. E. photo.

crops and a greatly increased efficiency in all-around operation. However, although the sale of comfort-producing electrical goods has been relatively easy, the sale of equipment for the farmer to use in his business requires more effort and intimate knowledge of the tasks involved.

Farmers must be shown what electricity can do in mechanizing their various operations. Farming today is rapidly becoming a highly skilled profession. The farmer is a better business man and agriculture is at its highest peak, where every opportunity for electrified mechanization has been employed.

More and more useful electrical apparatus can be sold to the rural market. Such farm tasks as operating silage cutters, hammermills, hay hoists, wood saws, water pumps are just a few places where electrical equipment can cut time and cost in doing big jobs. Employing electrified hay dryers will save thousands of tons of hay where otherwise rains or hail would have spoiled it.

Other uses of electrical equipment include fans in barns, milk houses, etc., milking machines, separators, electric drills, paint-spraying machines, cooling compressors, milk coolers, sterilizers, electric water heaters and battery chargers.

Last year farm income was estimated to be about 32 billion dollars or approximately 3 billion dollars under the record high income reached in 1948. Farmers are expected to receive about ten

FARM WOMAN must save time for such jobs as sewing, gardening, care of poultry and in these days, helping out with many other farm jobs in crop production. The modern labor-saving electric kitchen is the answer to her prayer. REA photo.

percent less this year, but this would still enable them to have a gross income double that of the 1935-39 average.

In selling electrical equipment for the big jobs on the farm, the salesman should direct his program along the same lines as when selling industrial concerns. The salesman should recognize that the problem of the farmer parallels that of the manufacturer: Increasing production and at the same time, reducing costs. The rural salesman must know how the equipment he wants to sell will enable farmers to cut their production costs from 25 to 50 percent and at the same time increase their output per acre.

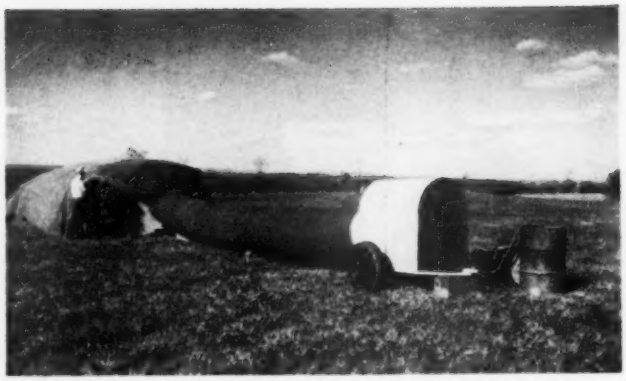
Electrification in rural areas is not new but each day brings new applications, new places, new ways that electrical equipment can be put to work to improve the farmer's operations.

Naturally, today, the largest demand for electrical supply salesman's products come from farms already served by power lines. The thousands of farms that have had electricity brought to them during the past five years offer a tremendous market for electrical equipment adapted to farm operations. Also they form a great market for appliances, lighting and lamps.

The farmer must be sold on wanting to be awakened by an electric alarm clock, shave with an electric razor and listen to the news on an electric radio. The farmer's wife probably needs less selling on wanting a modern kitchen complete with electric range, refrigerator, toaster and mixer, or an electric washing machine and electric iron.

However, buying electrical production equipment for use in his business is something not so obvious to the average farmer and there he wants to be convinced. Then, as more and more electrical equipment is installed on the farms, applications are expanded and new uses are discovered, the results obtained tell their own story.

For example, drying hay in the mow by means of blowers has become one of the most popular applications of this type of equipment on the modern farm, and means a juicy sale in the way of blower, control and wiring materials for the salesman who knows his story.



BALED HAY being dried by means of a portable blower—saving the farmer not only time and labor but also insuring his crop against adverse weather. G. E. photo.

ELECTRIC MOTORS have been put to work doing at least 53 jobs on the farms. Shown here is a portable motor driving a 30" circular wood saw. G. E. photo.

The idea of cutting hay, drying it in the field for a few hours, then moving it immediately to the mow where the drying process is completed appeals to the farmer. He visualizes the losses that he might incur by a heavy dew, rain or excessive sun bleaching. Farmers were quick to appreciate the fact that curing hay by forced ventilation was quicker, safer and at the same time gave them a greener, leafier hay that contained more food value.

The first installations of this type of hay drying were made only in mows but today, by using portable equipment, farmers can undertake processing hay right in the fields.

Farming today can be classified as big business and it will be even bigger as more and more electrical equipment is put to work doing the big production jobs.

The farmer is in a highly advantageous position and can become a very substantial purchaser of electrical equipment and appliances. However, the salesmen, contractors, and dealers who sell, service and install equipment in the rural areas must understand the market thoroughly and be carefully trained in rural problems and needs.

Distribution In Today's Business Demands Creative Salesmanship

Selling must begin with the engineer at the drawing board and application and service engineers must be available to give creative salesmanship its greatest chance for selling

By Chester H. Lang
Vice President, Apparatus Sales,
General Electric Company*

THE spotlight has definitely shifted, in the past year, from production to *distribution*—to the complex process of getting goods from the producer to the consumer.

We have suddenly realized that the distribution end of our great economic machine is suffering rather badly from neglect . . . . it does not run in step with our new, high-volume production machine.

Unfortunately, although the situation lends itself to a mechanical figure of speech, it's not a mechanical problem and can't have a mechanical solution. For one thing, before we can make any significant progress, we'll have to clear away a dense growth of prejudice that hides the real targets in our distribution system.

Consider the salesman, for example, the key figure in our distribution system. The salesman has often been drawn as the arch-type of American, but I venture to say he and his job are among the least understood in the whole world.

To many an engineer, serious talk about salesmanship is like serious talk about cheerleading. Arthur Miller, in "Death of a Salesman," draws him as a tragi-comic figure, "out there in the blue, ridin' on a shoeshine and a smile!" I ask you—how are we going to make any progress in the field of salesmanship, with such snobbish prejudice cluttering up our minds?

The advertising man—he's a huckster and a scribbler. The wholesaler—he's a middle man, a leech, a bloodsucker! And when the critics leave off this personal invective, they're likely to sum up our distribution system by announcing that advertising and wholesaling are largely economic waste. Selling, accounting, market research—well, they're necessary evils that don't add a bit to the value of the product.

Snap Judgments

To one degree or another, we're all guilty of these snap judgments and blanket condemnations. Let's study them for a moment, in their more common forms.

First, there's the notion that "distribution adds nothing to the value of the product." Engineers, who *do* add a lot of value to the product, are particularly susceptible to this fallacy. But it's just a matter of basic economics.

Production adds one value to the product: form utility. It gives raw materials a useful form. Distribution, on the other hand, adds *two* recognized economic values: place and time utility.

For example, fuel oil in the refinery has been given *form* utility—it will burn efficiently. But it takes distributors and salesmen and advertising men and accountants and truck drivers to get the oil into your fuel tank at home—place utility—when the cold weather arrives—time utility. And anyone who has caught a cold during a temporary shortage of fuel oil will tell you that this time and place utility is part and parcel of the product's final value.

Or take Coca Cola. How much does it really cost to make and bottle the stuff? Its value lies in having Coke *where* you want it and *when* you want it—for "The Pause That Refreshes."

And how often we hear that old

Kersh photo
Chester H. Lang

cry, "Distribution takes too much of the consumer's dollar!"

How much is *too* much?

Our fault lies in the assumption that distribution is merely an expense that adds to production costs. Let's take a more creative view: Let's recognize that distribution is our finest instrument to *reduce* costs.

Even today, management is full of production-minded men, who think that a new plant building is categorically a better investment than an investment in sales promotion simply because it shows up on the balance sheet. But that's not always true. There are many times when $150,000 invested in sales and promotion is a much better investment than $150,000 for a new production facility.

Distribution costs—including advertising—*are* fair game for management when it sets out to reduce costs. But as we go stalking through the budgets, taking pot shots at this and that marketing operation, let's be sure we keep our sights on the real target—the final, delivered cost of the product. Sometimes it may be wise to increase the percentage of distribution costs in order to lower the total cost.

So much for the popular prejudice that stands in the way of creative work in the distribution field. We agree that distribution is a necessary function; that it adds to the value of the product; that it is a subtle but effective instrument for the reduction of costs; and that it is in pretty bum shape after a decade of neglect.

How can we make our distribution system more efficient?

As a kick-off, I'd say that every business must carefully define its distribution functions, assign their management to experienced and imaginative specialists, and put somebody in charge of the whole shebang, to co-ordinate and direct the company's distribution, or marketing, operations.

With an organization of this kind you can *get at* your problems. You can study the distinctive functions individually, isolate their costs, and take up questions of cost reduction in an orderly and measurable way.

If I refer to our own General Electric experience in this respect, please don't assume that I'm setting our organization up as a paragon. It's simply that each of us must use his own experience as a benchmark, and I would hardly be qualified to discuss the other fellow's organization.

The following are the Divisions which are included in our Apparatus Marketing organization, which deals chiefly in the distribution of capital goods for industry. All these functions are integrated and directed by the marketing executive, toward optimum service to the customer.

First of all, we have a Marketing Research organization, to keep us posted on shifts in our markets, and help us forecast business trends.

The work of the Advertising and Sales Promotion Divisions, is carefully co-ordinated with the operations of our Headquarters Sales Divisions, which include Customer Groups and Product Groups. Most of these people are engineers.

The District Sales Divisions—our men on the firing line, operates eleven sales districts across the nation.

The Order Service and Warehouse Divisions, functions at the factories and in the field, and sees that the customer gets the stuff he orders.

The Application Engineering Divisions, also functions at the home office and in the sales offices, and is constituted for specialization in the varied industries we serve.

The Service Engineering Division directs the activities of our network of Service Shops.

Our General Staff, a very small group, consist of the general sales manager, the manager of application and service engineering, and a small placement and training unit for sales personnel.

These, then, are the functions we consider necessary to an industrial marketing organization.

I have not *dwelt* on these functions and their relationship, even though a clear marketing set-up will undoubtedly help to increase the productivity of the marketing operation. A good paper organization, in itself, will not necessarily bring about increased efficiency. The organization chart may be the starting point, but all it can do is set up the environment for healthy, creative human effort at all levels of operation.

I'd like to confine my remaining remarks to a few of the areas of *industrial distribution* that perhaps haven't received the attention they should. The very work "distribution" seems to imply a mechanical transfer of goods, and we have concentrated most of our distribution studies on warehousing and shipping operations.

The design engineer is not normally on the marketing payroll but he can make or break the marketing of your product. The spectacular success of Raymond Loewy and his associates gives ample evidence that products designed and styled with distribution—with the customer—in mind can make old companies new, and new companies worth the risk.

In design engineering, perhaps more than any other field, there is a danger of becoming ingrown. Unlike the sales and application engineers, your design engineers seldom see their customers first hand. Result: ivory tower engineering—designs that may not be suitable either for the customer or for the factory.

I've seen them and you've seen them too—the gadgets that seem plausible enough on paper, but simply can't be sold. The Patent Digest is full of them. And unfortunately, so are the warehouses and stores.

Selling begins at the drawing board. The design engineer must recognize his responsibility as a member of the marketing team.

In *industrial* marketing, there is a major role for the *application and service engineers.* Now, here are engineers who *have* schooled themselves in their customers' problems. And like good salesmen, they often seem to be working 60 percent of their time for the customer, and 40 percent for their employer. Cost-conscious management sometimes tries to skim on engineering service. But you just can't get away with it.

No one wants to supply *unnecessary* services, of course, and these can be eliminated. For example, the self-service super-market has been a success because housewives are willing to be their own clerks. But the self-service gas station has been something of a flop, I understand, because motorists would rather pay a bit extra for the services of the attendant.

The laundry business has found that women will flock like cackling hens to those public laundry rooms where you bring your wash, stick it into an automatic washer for two

bits a load, and take it home when it's done. But there's still plenty of business for those laundries that supply all the services, including pick-up, handling, delivery, and too much starch in the collar.

In industrial selling, the application engineer performs an indispensable service for both his customer and his employer. And in the electrical field, at least, *you must* supply a *superior* engineering service, if you want to get the business.

There are examples in every industrial field. Back in 1920, cold-strip steel mills ran at about 200 feet per minute. Working with the steel mill engineers, the application engineers of the electrical industry developed improved electric drives that had the mills running at 3,000 feet per minute by 1939.

By 1948, our application engineers knew of still other electrical developments that looked promising, though they hadn't been tried in the steel industry. Utilizing the amplistat, the x-ray thickness gage, and other new tools, they developed a steel mill drive that can run 6,000 feet per minute—better than 70 miles an hour!

Now certainly these engineering developments took manhours which must be charged against the distribution operation. They were part of the sale.

But engineering service of this kind builds up a customer relationship that is invaluable in industrial marketing. Just the other day, believe it or not, I saw an order for better than a million dollars and the specifications were written in a single sentence: "Supply the electrical equipment to operate one five-stand Mesta Mill at a speed of 3800 feet per minute." You can be sure we *supplied* more complete specifications later, but when customers place that much confidence in your application engineers, you're ready to admit they're worth their pay.

And how often do we think of *service shops and service engineers* as part of our marketing organization. They certainly are. They are the last important link of relationship with the customer, and sometimes I'm afraid they're the missing link.

"Love 'em and leave 'em" is the mark of a fly-by-night. But if you plan to stay in business, you'll have to set up a service system to keep

MANUFACTURING ADDS ONE VALUE . . .

It changes raw materials into a useful form. Curtis Lighting photo.

DISTRIBUTION ADDS TWO VALUES . . .

It delivers the product to the place where it can be used. Here the salesman is selling a lighting job to the board of directors of a large chain store organization. Ewing Galloway photo

It delivers the product at the time it is needed. The lighting fixtures are installed and ready to do the job described by the salesman. Leader Electric photo.

the equipment running after the customer buys it.

Why do new automobile companies have so much trouble finding customers? It's not so much that the prospects have doubts about the new car itself, but they're afraid that adequate parts and repair service may not be available.

A good system of service assures the customers of convenient facilities for quick, high-quality repairs. And incidentally, good service facilities are likely to trim production costs, too, by taking over that unprofitable repair business that ties up the factory.

But I'm giving the engineers too much attention. Let's turn for a moment to a field where their influence is somewhat less decisive: Advertising and sales promotion.

Why do we advertise anyway? Advertising is not something we do for fun, or ballyhoo, or habit, or pride. It is a method of helping to sell goods.

Do you want an example of how advertising and sales promotion can increase the productivity of a sales staff? Last year we announced a new product for the industrial market. It was an improved product, to be sure. And right here, let me say that we do not believe in putting advertising dollars behind weak products. Better spend money on a new design rather than try to bolster a weak item in the line.

But, believing fully in this new product, we put the necessary advertising dollars behind it. And just six months later, with the same sales staff and very little additional sales expense, we were doing three times the sales volume. In other words, the productivity of our sales force on this line has increased three-fold as a result of a good product made known to our customers.

You can get results like this with advertising and sales promotion—but the promotional materials must be sound, practical stuff, with an emphasis on selling, not cleverness. We've all seen too much of that beautiful but dumb advertising that makes a nice four-color impression, but somehow doesn't get around to the product and what it will do. Unless advertising really sells—unless it's carefully integrated with actual sales operations—we're just going to have a lot of wheels turning in space. And as any engineer can see, that's inefficient.

Well, I've been speaking about many factors that affect distribution in today's business. But I've been saving the most important one till last—and that is creative salesmanship.

What is creative salesmanship? Why, it's selling an electric furnace to a gas manufacturer. One of our salesmen did that, and I don't think we'll ever quite analyze how he did it.

Not that I want to discredit the habit of analysis. We will all benefit from the engineering approach, or the cost-reduction approach, or whatever you want to call this introspective, analytical attitude toward distribution. But in the long run, our success must finally depend on that persistent extrovert, the salesman.

No matter how much we deplore his sometimes obvious and round about methods, he is at the heart of any truly creative distribution program. We can set up the most beautiful distribution machinery in the world, but it won't move goods until he applies the sales power that puts it in motion.

Unfortunately, sales power has lost that high-octane quality it had before the war. Salesmen have not been exempt from the softening up that for nearly ten years has plagued nearly all elements of distribution.

As *Fortune* magazine sums it up, "They waste time; they call too often where they are known and liked rather than where they have to work hard; they don't use what few sales aids the company provides them. They have forgotten how to 'get in there and bleed all over the man's carpet.' And even when they deliver some effective persuasion, they don't know how to close the deal."

That's a serious indictment, positively appalling because it's levelled against the man who, as we have said, is at the heart of any creative distribution system. Who is going to pull American salesmanship out of the doldrums?

In the last analysis it will have to be the salesman himself. But management has the important responsibility of supplying the leadership that our salesmen need.

The duty of marketing management is not merely to supply salesmen with cars and handbooks and sales aids. It is not merely to analyze procedures and identify markets. The first duty of the management is *inspiration*: to spark the creative *urge to sell in our* "timid" sales force, and in all the elements of our distribution system.

Perhaps such subjective terms as "inspiration" and "creative urge" seem out of place in this seminar on distribution, which has distinguished itself in the past years by its practical, objective approach to the problems of distribution. But I submit that there is nothing more practical than inspiration, and nothing more *impractical* than a system which has no room for the human motivations which don't quite fit under the heading of "logic."

By all means, analyze your procedures from a time-and-motion point of view. Trace your product from factory to customer, to see where it's dawdling or taking detours. Study your markets and your products, so that your selling can start *at the drawing* board. Cut costs wherever you can safely do so. Integrate your distribution activities under one central plan.

But above all, inspire every man and woman in the marketing organization with a creative urge to improve and simplify his job. Any large scale improvement in the efficiency of a company's distribution techniques will come not from the Olympian analyses of the great brain who sits at the head of the organization, but from the cumulative contributions of salesmen and warehousemen and advertising men and application engineers who are each trying to do their part a little better.

This, as I understand it, is the way that modern management engineering works—the democratic way, bringing into play the full talents of every human soul in the enterprise. Thus, directed, a creative distribution program is one of your surest instruments to cut costs and to increase your company's profits. And if it does that, you can rest assured that *your* distribution organization is hauling its own freight in today's business.

"Excerpts from an address entitled "Distribution in Today's Business," delivered before the American Society of Mechanical Engineers.

Skeptic

Clansman

Procrastinator

How To Crack The Tough Ones

Here are some useful tips on how to handle the tough guys who have fallen into some fixed habits of keeping salesmen coming or going

By Edmund Mottershead

FIELD salesmen fighting on the firing line for business in today's competitive market find that certain "types" of buyers present special problems and require special handling.

When we describe these people, of course, we know that "types" as such are not accurate descriptions, but that any one individual may well be a mixture of several types; however, in order to tap the thinking of experienced field salesmen and put their best thinking on record, we identify their sales techniques with the "types" of buyers which require special treatment.

The "Skeptic"

The skeptical or suspicious buyer is either a born Doubting Thomas or is bitter from having been disillusioned too many times. No matter what you tell this man, he discounts it heavily.

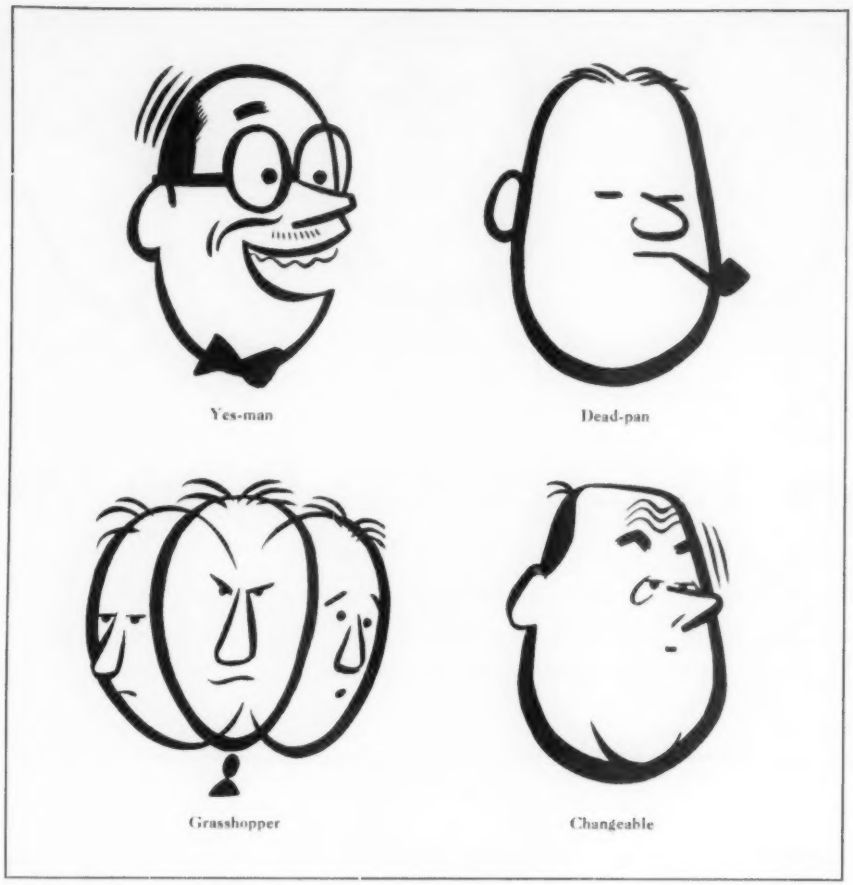
First sympathize with him in your own mind . . . . the poor guy has been deceived so often that somebody really ought to give him a square deal. Then remove his doubts by being conservative, sincere, and simple in your presentation. Show him that it is to your advantage to give him a square deal. Use understatement. Present facts and proof in plenty and play them down. He will be quick to realize that your testimonials and actual proofs of value mean more than you are claiming they mean.

Another portion of the technique of handling skeptics is to build up "areas of agreement" on minor points in the problem. Your biggest task is to build up his confidence in you, and the more he sees that he can agree to, the more he will be inclined to give credence to the rest of your story. Make sure he understands each step of the way. Your task in handling the skeptic is much the same as that of the young man approaching a desirable and beautiful young lady: He must first make her like him; then make her understand him; then get her to believe him; and finally to follow him. The sale is made to the skeptic only when his confidence in you has been established firmly.

Dead-pan Pete

The indifferent type of individual seems to be totally unconcerned and uninterested in whatever you may say or do. He goes about his own work or business well enough, but seems to have no initiative or real interest in much of anything. Your ideas he thinks are sound enough, but he hardly seems to think it is worth the effort to do anything such as you are suggesting. He is mentally inert.

First of all, this indifference may very well be an act. All of us have something or someone who is important to us. Your task is to lead him along in friendly conversation until he gives you some clue to the possible areas of his hidden inter-



ests. Just as there are hidden values in your product; so there are hidden motives and interests in apparently indifferent buyers. Dig them out, and appeal to them strongly.

Sometimes it is effective to scare these buyers a bit. Show them the dangers they are facing through their indifference and inertia. Show them possible financial loss through failure to make a decision and act. Use their hidden interests as your leverage.

The "Yes Man"

Most experienced salesmen are familiar and disgusted with this type of individual. He is the "kiss-me-in and kiss-me-out" type of buyer. He is always friendly, always so very glad to see you, always is giving your proposition every consideration, but he never buys—maybe next time. While he is doing this, he picks your brain on everything from technical data to market information and merchandising ideas and invites you to stop by next time.

In some extreme cases, this man is guilty of leading a salesman on in order to squeeze every bit of information possible out of him without spending any money. The Greeks had a word for him, too.

Handle him the way you would a professional procrastinator, only more so. Put him over a barrel first by telling him you appreciate his friendly spirit. Tell him you know that he appreciates the true value of the information and help you have already given him. Say that there are a lot of people (not he of course) who show a friendly spirit, but then never do anything. Really capable executives such as he show friendliness and then come through with results. Put him in the position where he either has to come across with an order or admit publicly that he really has no intention to buy from you.

Grasshopper Gus

Here is a very very busy man whose desk is usually piled two feet high with accumulated correspondence (and unread advertising circulars) which he should have taken care of two weeks ago. He frequently has three or four telephones on his desk, a secretary or two running in and out, a bottle of vitamins in one drawer and a can of laxative in another. He is always

in a hurry, always rushing about, constantly interrupting your story to take care of some inconsequential detail his secretary should handle herself.

The fact is that this type of buyer has what the old correspondence course ads called a "grasshopper mind." He has great difficulty in concentrating on one thing at a time for more than a couple of minutes. His apparent dodging of your presentation and interrupting your story is less intentional many times than you may suppose.

Start out by admiring how busy he is, how burdened with responsibility, how much he *gets done*. He will stop long enough to listen to a little praise. Tell him you know his time is valuable, and in order to save time will he please give you an uninterrupted five minutes (however long you need) and let you get done and get out of his way so that he can tend to his other responsibilities. Show him that you respect his ability, and tell your story briefly, but with strong emphasis on his *need* for your product or service. Sell need and satisfaction, and stress the importance of his making a decision now.

The "Clansman"

Prejudiced people, like gold and iron pyrites, are where you find them. Some of them are buyers. This type of man has a biased slant on life. He cannot be "sold" anything, cannot be told anything, and cannot be moved to do anything, unless it falls into line with his preconceived notions and prejudices. He hates Republicans or Democrats, wets or drys. The unfortunate thing is that most of these prejudices are not only completely unfounded on fact, but they are almost impossible to eradicate.

Remember that we are all creatures of emotion, and that prejudice is one of the strongest of emotional forces, especially in this man. You have to have the support of his prejudices for your own ideas if you want to get anywhere with him. If you can show him that your objectives fall into line with his thinking, he will be for you. If you try to beat down his prejudices or enlighten him, his prejudice will only become stronger . . . . against you. "A man convinced against his will is of the same opinion still."

If you have any inkling that your listener has such prejudices, find out all you possibly can before you see him. Avoid mentioning the "touchy" subjects at all. At the same time phrase your remarks in such a way that he realizes that you think as he does, and, more important, that other people who think as he does agree with you. He gets his feeling of personal importance from thinking he is right, and it flatters his ego to know that others agree with him. "Sensible" people who agree with him must be right when they, too, do business with you.

The Procrastinator

This man puts things off again and again. He usually agrees with you that something should be done, will offer little or no objection, but will never ACT. He says he is "sold." "See me on your next trip, I'll know what I want to do then."

This man is a procrastinator by nature. It is not that he has any legitimate difficulty in making a decision, so much as it is his ingrained dislike or fear of making any decision at all. He doesn't question or doubt what you are saying; he just hasn't got the intestinal fortitude to make a decision of his own. Possibly all his life this man has had someone else make his decisions for him. Possibly he has been badly burned in the past because of some decision which he made without getting sufficient information on which to make a decision.

The most effective way to handle this man is to use a little dynamite. Threaten him or scare him with the possibility of loss due to delay in making up his mind. Dramatize the need for and the importance of the action you want from him. Offer him a very desirable opportunity; then tell him this opportunity may exist for a given period of time only, and suggest that it might not be available indefinitely.

Finally, put him over a barrel by saying something of this kind: "Mr. Smith, I appreciate the fact that many people would like to delay making a decision of this kind. I know that you are a man with the courage of his convictions. You don't dilly-dally. You ACT."

Changeable Charlie

The chameleon is a little animal which changes its color on a "now you see me—now you don't" basis. Once in a while you run into a buyer who is fickle, changeable, vacillating. He decides to do a thing, and then to undo it. He will agree with you one minute and disagree the next. One day he seems to like you and the next time he sees you he makes you wait an hour for no apparent reason.

The underlying cause of this indecisiveness may be either that he simply lacks the power or authority to make a decision, or that he has a fear of making a decision and sticking to it, or possible that he is really not yet convinced of the merits of your proposition; in other words, he feels he has not yet received enough information upon which he can base a decision.

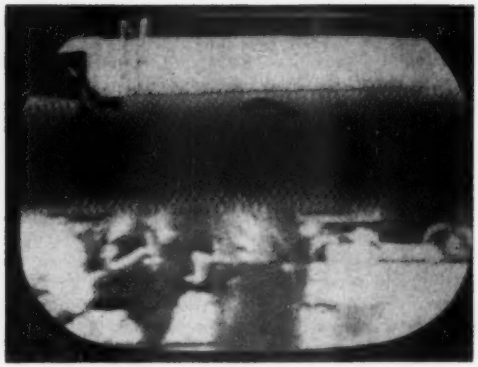
First of all, qualify the man in your own mind. Has he the authority to make a decision? Has he the power to sign an order? If not talk to the man who does have the authority. However, if he *is* the man who decides, don't lose your temper or your patience with the changeable man. Sell him strongly on the need for your product or idea. Give him more and more facts and information.

Emphasize strongly every good point in your presentation. Tell the full story. Ask him at each step if that is clear, if he understands, if he believes. Then tell him that after all you are not just "selling" him something—you are really on his side of the desk helping work out your mutual problems. His contribution to the solution of his problem is making a decision and sticking to it. You have other commitments to comply with, and you are relying on him to stand firm on his decision.

Be a Problem Solver

The day is long gone when professional salesmen attempt to size up a buyer by the shape of his nose, the color of his hair, or the size of his paunch. However, professional, experienced field salesmen do consciously cultivate the habit of deliberate and careful appraisal of the men they confront on the firing line every day. Whether or not your buyers fall into these categories is not important. What is important is your attitude of a problem solver in helping all your buyers satisfy their needs by making the correct buying decisions.

AUTOMOTIVE IGNITION causes characteristic interference in form of broken horizontal lines of irregular pattern.



MILD DIATHERMY interference shows up as a central band across picture in characteristic "marble frosting" pattern.

What You Should Know About

Power companies are not always to blame for poor reception and fogged-out pictures says engineer F. L. Greene in presenting the eight most serious causes of television interference — and what can be done to reduce it

THE time has come for distributors, dealers and servicemen to know just what actually causes the various types of interference and be able to diagnose the trouble accurately in answering complaints from customers.

Dealers and servicemen frequently tell television users that the power company is at fault when customers complain about interference on their television screens. Actually, Mr. Greene points out, there are eight more serious causes of television interference than power line noises.

In order of nuisance value and severity here are the leading trouble makers:

Automobile ignition systems; old diathermy equipment; old-type tungsten-filament lamps; some bactericidal lamps; various radio-transmitting equipment; some electronic garage-door openers; dielectric-heating equipment; some customer-owned household appliances; power-line noises.

Although the above are considered the major causes of television interference, weakness of video signal strength and defective antennas or installations are also found responsible for poor reception.

The best means of tracking down interference causes, Mr. Greene advises, is to keep a record or log of the exact time and day the interference started as well as the duration and a description of it.

In tracing what he considers the major causes of television interference, Mr. Greene used portable test sets equipped with a signal strength meter, a switch to disable the automatic gain control system of the set, and a manual contrast control.

Ignition Systems

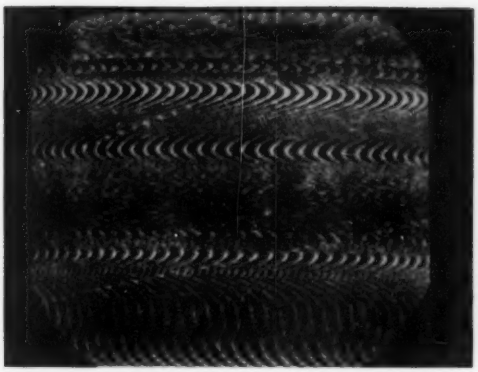
Ignition systems on automobiles, especially older models, were found to produce broken horizontal lines across the picture. However, it was found that cars equipped with ordinary distributor-type suppressors cause less interference. Resistor-type spark plugs (like Auto-Lite) practically eliminate the interference and simultaneously improve gasoline-engine performance, especially in smoother idling on high-compression motors. Chrysler Corp. is installing such plugs as standard equipment on all this year's models. All car manufacturers should eventually install preventative equipment at the factory.

In some cases of interference due to ignition, we recommend relocation of the antenna to shield it from passing cars.

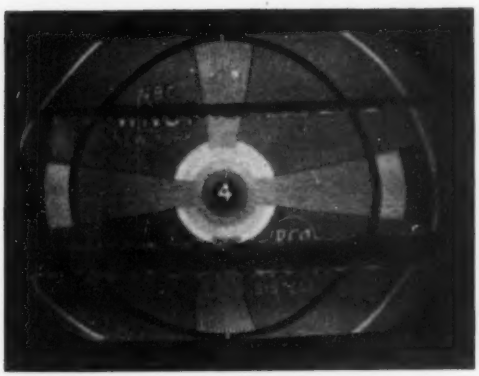
Diathermy Equipment

Old-type, self-excited, self-rectified diathermy equipment operating at random in the radio-frequency spectrum is a serious cause of inter-

Excerpts from an article appearing in Electrical World under the title, "Television Interference Seldom Comes from Power Systems," and written by F. L. Greene, inductive coordination engineer, The Ohio Power Co., Canton, Ohio.



SEVERE DIATHERMY interference spreads all over the picture area, also in the typical marble frosting pattern.



TUNGSTEN LAMPS of the old zig-zag filament design may emit oscillations which result in two horizontol bands.

Television Interference

ference because of its fairly high-power radiation, and/or strong harmonics. Severe interference from this source may produce a heavy-black band across the picture, which changes to a light irregular S-shaped vertical pattern when the interference has less intensity. Fortunately, the Federal Communications Commission ruled against this old-type diathermy equipment about 3½ years ago and gave doctors 5 years in which to amortize their investment in such equipment purchased prior to that time and substitute approved equipment. All new diathermy equipment produced since the FCC ruling has been crystal-controlled, has filtered d-c power supply, and is assigned to specific operating channels.

Interference has been effectively reduced by two methods: (1) shielding the diathermy equipment and the treating areas; (2) where certain treatments produce interference, those specific frequencies are altered by spreading or compressing the turns in the tank circuit. Shielding a portion of the treating leads is effective in lowering the output frequency when it is impossible to spread or compress the tank-circuit turns. This provides additional capacity across the self-excited tank circuit. The second remedy (altering frequency) was necessary in several cases before the advent of television, to avoid interference with our 31.46 mc space-radio channel. In one case where severe diathermy interference of television was traced to a hospital, the seriousness of the situation was explained to the hospital officials who readily agreed to purchase three new FCC approved units immediately to alleviate the situation.

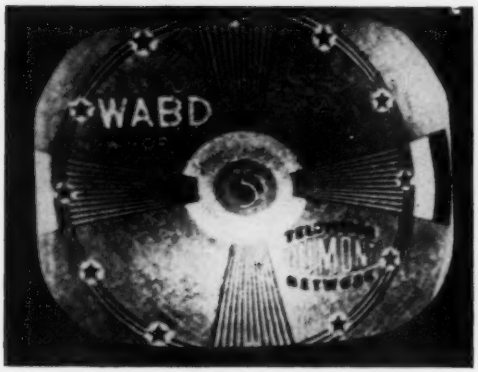
Two of the new FCC approved units with crystal control were found to produce a sufficiently strong third harmonic to cause interference with Channel 5, one block away. Rather stringent regulations should be formulated and enforced to limit radiation of harmonics, especially the third. It could be accomplished by specifying the maximum permissible spurious output, which should be considered in the design and manufacture of diathermy equipment.

Old-Type Tungsten-Filament Lamps

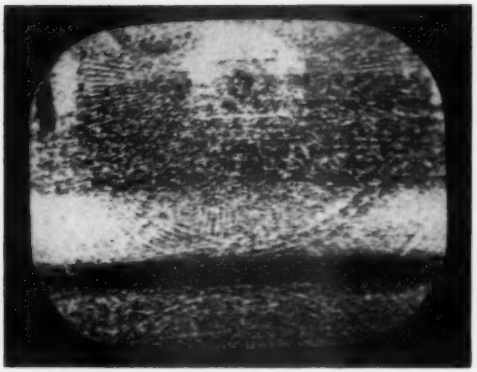
The old-type lamp using straight tungsten wire, folded several times over supports at the base and top is not only an inefficient light source but a cause of television interference. Such lamps have extremely long life and many are still used in some hallways, bathrooms and other places where the amount of light is not of prime importance. Such lamps emit an RF signal usually around 20 to 27 mc, modulated several hundred percent at power-line frequency. This radiation is rich in harmonics which fall into one or more of the low-band television channels.

The effect on the picture is approximately the same as that of diathermy, except for duration. Some of these offending lamps may be left on hours at a time, which would indicate that short-use diathermy is not involved. The maximum area affected by old-type tungsten lamps is approximately 3 blocks in radius from the offending source. Sometimes the interference appears as two or more narrow bands. Tests with several of these old lamps show the signal is very broad—about 2 mc at the fundamental frequency of approximately 25 mc.

The cause of interference appears to be due to their acting as dynatron oscillators at the points inside the bulb where the tungsten filament from the base terminals approach the tip of the bulb. At these points a slight carbon deposit develops on



HOUSEHOLD APPLIANCES may produce "sand paper" or "snow" patterns which, when mild, dot the picture received.



HOUSEHOLD APPLIANCE interference when severe causes obliterating "snow" pattern. Commutators are worse offenders.

the wire and naturally a difference of potential exists between these two points. This might not occur if the lamps were completely evacuated. In fact, it appears that only those lamps with a small remaining amount of air or gas impurities oscillate to cause television interference.

Location of such interference is, in most cases, very difficult at present due to the irregular operating time of the offending lamps. If the customer's antenna can be easily rotated, it may be turned to determine the direction of the offending source, and thus help locate such lamps. Location of such interference would be greatly aided by using a battery-operated portable television set such as mentioned in the accompanying article.

Bactericidal Lamps

Some types of bactericidal lamps used with walk-in coolers, freezer lockers, and in butcher shops cause extreme television interference because they radiate a signal due to being energized at an RF voltage supplied by vacuum tubes housed in bakelite compartments on either end of the lamp. They radiate a fundamental frequency between 20 and 37 mc and also a second harmonic which is very severe in television channels. Interference is caused over a radius of approximately 8 blocks.

This interfering type of lamp is no longer made; the manufacturers now produce only the so-called cold-cathode type which operates directly from a 60-cycle power supply. So far the new type has not been found to produce interference. Manufacturers have a trade-in arrangement whereby users can get a new cold-cathode bactericidal lamp at a price based on the number of months the old type lamp, which has been causing the interference, has been used.

Transmitting Equipment

Sometimes transmitting equipment such as AM or FM broadcast stations, police, taxicab, amateur, state-highway and utility space-radio systems emit strong enough harmonics to interfere with television reception. In very close proximity to such transmitters, the front end or RF stage of the television receiver may be blocked by the fundamental frequency of the transmitting station. Another prevalent type of interference by transmitting equipment operating at its assigned frequency is caused by direct pick-up of the carrier by either video or sound IF systems in the television receivers.

The first type of interference may be readily prevented in the offending transmitter by trapping out the unwanted harmonics which serve no useful purpose anyway. The cure can be fairly easily effected by additional resonant circuits or by attaching to the transmission line quarter-wave open stubs or half-wave shorted stubs cut for the interfering harmonic. The owner should have no objection, particularly since his license may be revoked for emitting spurious frequencies.

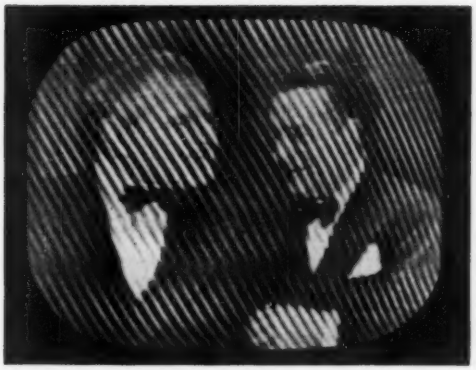
Overloading of the front end of the television receiver may be cured by adding tuned traps or a stub line tuned to the fundamental frequency of the interfering transmitter, or a high pass filter in the receiver antenna lead.

Direct pick-up by the IF systems may be remedied by traps in the receiver circuits, and shielding or changing the IF frequency of the receiver.

Electronic Door Openers

Some modern garage-door openers radiate fairly strong RF signals which sometimes interfere with television reception. At least one make of garage-door opener, employing a small transmitter in the automobile and a receiver in the garage, utilizes radio signals that can actuate the mechanism when the proper automobile is two or three blocks from its garage. Since the receiver in the garage must be in readiness all the time that the car is out, the local oscillator emits a signal which may produce television interference within a radius of approximately two blocks.

This may be one clue to location of such interference which shows up on the television screen as vertical or leaning corduroy lines, usually rather unstable. The frequencies involved usually fall in the high channels (11, 12 or 13) because the frequencies of several door openers of this type in the same area must be staggered so each car owner can



NEIGHBORING RECEIVER may emit radiation causing diagonal slashes to appear on the screen if the signal is moderate.

NEIGHBORING RECEIVER emitting strong radiation may result in inversion similar to that of a photographic negative.

open only his own garage doors. So far, a report to the sales agency for the door-opener in this area has brought about corrective measures, frequently by shifting the door-opener RF away from the television channel.

Dielectric Heating Equipment

Dielectric heating equipment such as used in curing rubber and processing plastic, is usually high-powered (5 to 50-kw output). Consequently the RF radiation may interfere seriously with television sets at considerable distance. One installation used in sewing plastic materials and rated at 15 kw made reception on channel 3 impossible within a radius of several miles.

At close range, the effect on the screen was similar to that of diathermy equipment with picture reversal; at greater distance, it appeared more like a corduroy pattern.

Very careful layout of the initial dielectric heating installation plus its adequate shielding and/or change of frequency seem to be the only ways to minimize such radiation. The last two remedies corrected the specific case of interference mentioned above.

Appliances

Customer-owned appliances such as vacuum cleaners, electric sewing machines, electric shavers, etc., sometimes produce television interference similar to that caused by ignition, except for a more consistent screen pattern showing a horizontal streak. Fortunately this type of interference takes place in a local area, usually within 100 ft. of the source. The worst offenders are commutating motors and thermostats in heating appliances, particularly those thermostats which do not have a snap action to interrupt the circuit.

To reduce the effect of domestic appliances, small mica condensers, standard paper condensers (0.01-0.25 uf) may be connected from the terminals of the offending device to frame or ground. This remedy is only partially effective with heating device thermostats. A 100 percent cure for direct radiation is impossible without shielding, which would be rather impractical in these cases. Since the area of interference from many domestic appliances is so confined, most people feel they can put up with the interference from such sources during the short intervals while the household equipment is being used.

Power-Line Interference

Tests made so far indicate little or no interference from our power lines under normal operating conditions even with the video antenna only 20 to 30 ft. from these energized circuits. A usable to very good picture was received in all cases with the broadcasting station about 45 miles away and with a 50-300 mv signal input to the television receivers; results depended on location and elevation of receiving area with respect to the video broadcasting station. These results were obtained outside the primary broadcasting range, namely 500 mv per meter contour.

Television receivers are not necessarily influenced by conditions which might interfere with the standard AM sound broadcast band; the latter may be disturbed by very old 13 to 33-kv lines on old-type pin insulators and by some early 66-kv lines. However, very few television complaints have been traced to such lines.

During the last 18 months, only a dozen out of many cases of interference have been traced to power lines. One case was traced to a cracked 4-kv insulator which did not interfere whatsoever with the broadcast band. The interference was felt only 1/10 mile from the source. The effect on the video screen looked exactly like that caused by ignition, except that it was continuous.

One defective lightning arrester and static discharges from some types of line hardware were other causes.

Tests made directly under our oldest 132-kv circuit, with the television antenna about 20 ft. from the bottom phase, showed good reception except under heavy rain and snow conditions. Even then, very good television pictures were received when the receiver was moved only 150 ft. from the line. Further tests are now being conducted in close proximity to the 500,000-v full-scale experimental lines of the American Gas & Electric system near Tidd plant.

It Takes Sales Power

By J. H. Jewell
Vice President in charge of Sales
Westinghouse Electric Corp.*

J. H. Jewell

RATHER than talk about your potential markets, new uses for electricity, or new equipment to use power—things which you all know about, I shall start right in on some plain and simple selling principles which, I believe, if applied to this electrical business of ours will lead us to new heights in the consumption of power and in utilization equipment.

There are no limits to the possible use of electrical power. This can be proven and is substantiated every day. Therefore, I hope you'll find my suggestions helpful but, certainly, I don't want anything I say to interfere with your impressive home-run average.

Nobody buys electric products. They have to be sold! In a similar way, nobody buys electric power. It, too, must be sold!

I know that as a public utility, your basic obligation is to provide service. But service alone cannot sell power. **Electric power is sold only when someone is sold an electrical product which utilizes that power.**

We tend to forget the millions of dollars and the many years it took us to sell men the idea of abandoning other forms of energy. We tend to forget the millions of dollars and the many years it took us to sell women the idea of abandoning the broom, the washtub, and the ice box.

A whole new generation of salesmen have grown up who never knew those days. The commercial and industrial men have had to spend most of their time expediting. The retail appliance salesman has placated the customer and pleaded with the supplier. How could we expect them to know that in a competitive economy, things have to be sold?

But you who are here today represent an important segment of the utility companies of America, who have, despite incredible financial odds, financed a six-year post-war expansion of nine billion dollars through 1951. You are also seeing public power agencies, federal and local, carry the expansion programs that amount to more than half a billion dollars annually. You have seen the expenditures of hundreds of millions by electrical manufacturers for additional plant facilities.

If we are to keep these giant machines busy and reach out for the markets that will help our industry grow still further, it is going to take sales power on a scale which we have never attained before.

The appropriations for sales power—both yours and ours—should be based on a realistic appraisal of the opportunities ahead, and a willingness to expend as much effort per dollar of present sales in pioneering new ways to use electric power as we have done in the past.

What is the right way to use sales power? It seems to me we must go back to fundamentals if we are to plan effective sales campaigns and get value received in our sales dollar. Different kinds of buying require different kinds of sales power. Basically, there are only three kinds of buying: Impulse Buying; Considered Buying; and, Specified Buying.

Impulse Buying applies to such products as chewing gum, breakfast foods, or electric lamps for the home. This requires sales power in the form of continuous and multitudinous advertising impressions. This kind of advertising tells what the loose-change product will do toward gratifying some simple want, but it is unnecessary—and, in fact, a waste of sales effort—to give much of an explanation why. The cost of the product is so small that the buying is done on impulse, with little thought.

Considered Buying is that which requires some pro and con thinking. People consider briefly when they buy an iron or a toaster. They consider for a longer time when they buy a refrigerator or a range. The way to use sales power for this kind of product is to tell not only what the product will do to solve a problem in living, but also, why and how it will do this. Consequently, part of the sales power should be expended both for literature that tells why and demonstrations that show how.

To Sell Electric Products

To continue expanding your markets you must know what kind of sales power is required by the three major types of buying

Specified Buying is the most exacting kind. It occurs primarily in industry. Exact standards are established to which each piece of equipment must adhere. The way to use sales power for this type of buying is to provide adequate information on the basis of which the buyers can draw up the specifications that will solve each application problem.

To coordinate sales power for the greatest effectiveness, we have four useful tools: advertising; sales promotion; sales education; and, action-getting devices.

Impulse Buying involves only the headquarters sales and advertising staff, who advertise direct to the buyer. The huge volume of advertising literally pulls impulse goods through the channels of trade. The sale happens so fast that the dealer is seldom involved; but his cooperation in setting up point-of-sale displays is important.

Considered Buying involves every person all along the line of distribution; manufacturer, wholesaler, dealer and buyer. In addition, public utilities, contractors and architects can be powerful influencing or merchandising factors. The most important member of this team, perhaps, is the retail salesman. As to campaign tools—all four are important.

In Specified Buying, the members of the selling team are the manufacturer and utility sales department, the engineer and the professional buyer. The most important tool is sales education.

Let us look at some electrical examples of each type of product, and the ways in which selling tools are being used, to make effective sales campaigns.

An electrical example of Impulse Buying is lamps, for home use. There is still a vast market for the sale of more lamps to fill empty sockets, and for the sale of lamps of higher wattage.

Team work has been excellent. It has involved all segments of the industry spearheaded by the Better Light—Better Sight Bureau. Selling tools have been used most effectively. The Bureau's promotion has been on a mass basis. Almost countless millions of pieces of literature have been distributed. Movies and many new forms of mass promotion have been used.

Manufacturer advertising has been well-suited to the product. You are all familiar with the G. E. campaign that has made the term "bulb-snatcher" a part of our language. You have noticed, too, I hope, our highly successful lamp contests, two of which ran last year, and two more of which are slated for 1950. All of these promotions are well adapted to the impulse type of buying. We may inquire what else might be done to stimulate sales of more and higher wattage bulbs?

Here are some questions I want to leave with you on this kind of selling:

1. Since repetition and display are so important, should you devote even more space on your properties to manufacturers' lamp displays?

2. Could your salesmen who call on lamp dealers get them to use displays more effectively?

3. Could you intensify your own campaigns to help promote the idea of having plenty of high-wattage bulbs on hand?

Now, let us look at some electrical examples of considered buying. The market is of three broad types: Rural; residential; and, small commercial. Here lies real gold for all of us.

The Rural Market

About five million farm families were connected to power lines by the first of this year, but the work of selling electrical equipment and appliances to them has only been started. In addition to this, there will be another half million farms electrified during the next few years. All of these are waiting to be sold the host of devices that utilize electric power. To the farmer, electrical equipment brings extra hired hands at far less cost. This includes water systems, milking equipment,

motors and food grinders.

To the farmer's wife, electrical appliances mean freedom from drudgery.

For example: the increase of dairying will pave the way for selling electric water systems, milking machines, milk coolers, electrical feed processing equipment, workshop tools, and electric hay drying equipment.

If you are not already familiar with our present farm program, I'd like to tell you about it for whatever it is worth in suggesting similar mass-action selling. The program consists of inviting farm families to attend a meeting where farm equipment and appliances are displayed and demonstrated. A new color movie, "More Time for Living," based on the use of electricity on the farm, has been created for this purpose. Light refreshments are then served after the movie.

IMPULSE BUYING moves small cost items for your dealer customers when you help them display the items properly in order to capture loose-change sales.

These meetings have been most successful in creating a lot of interest, and the attendance has been surprising. Over 300 such meetings were held in 1949 by our distributors and retailers. These movies will continue through 1950.

Another element is our 4-H activity. We give awards to young men and women who are seeking better ways of putting electricity to productive use on the farm. These young farmers are finding out for themselves the many advantages of electricity and more than that, they are teaching these advantages to others.

In addition, we supply application information bulletins on Motors and Control, Electric Heating, Farm Welding, and Farm Lighting, as well as a specialized bulletin on electricity in the milkhouse. Hundreds of thousands of these bulletins have been distributed to farm customers by dealers and through agricultural schools.

The Residential Market

Conservative estimates based both on economic study and buying intention surveys point to an annual volume of retail appliance sales of four billion dollars by 1959—an increase of 25 percent, of which a large percentage will be major appliances.

To bring this goal ever closer, electrical manufacturers are developing new appliances and redesigning old ones. A good example is the new, highly efficient dryer that can be plugged into ordinary house current.

Your home market will be an especially good one for power. Family income is increasing faster than for the country as a whole. Percent of saturation of many standard appliances is relatively low. Both these things make a high level of appliance sales possible.

Throughout the country, manufacturers' residential sales campaigns are being based on the significant changes that are taking place—electrically—in the home. This has changed also the nature of educational efforts. All of us have a tremendous training job to do. The big problem is to get retail sales people to demonstrate products on the floor; to know their story well enough to make a convincing demonstration.

Our sales people must actually show—how well an oven bakes; must pull ice cubes out of refrigerators; wash and dry clothes in the sales room. NEMA is trying to get this idea across as are all the manufacturers. We are convinced that it's the type of selling we must do to make money.

While dealers' appliance training must continue, we must extend our educational campaign to encompass the influencing factor in the residential construction industry.

This is because we believe it is in the new-home field that the development and application of electricity will change living habits most rapidly.

Homes of today require studied electrical engineering if they are to be modern. We and other manufacturers and utilities maintain a Better Homes Bureau to develop these engineering standards, to test them, educate and sell the various building professions in their advantages and uses, and to initiate programs that will help create public demand for these improvements and higher standards.

Special promotions are being developed and initiated to dramatize these electrical developments to the residential building industry, as well as to the general public. This work involves close collaboration with national professional organizations, as well as field demonstrations with Special Exhibit Home promotions and Electrical Living Expositions.

The Commercial Market

Naturally, a large part of the future business in the commercial field will come from Lighting Equipment. Stores are learning that lighting increases sales. Public

CONSIDERED BUYING requires that your dealer customers know what, why and how the product will benefit customers.

SPECIFIED BUYING demands that your contractor customers know the exact specifications and applications for the product.

officials are recognizing that adequate street lighting is a civic responsibility and a source of pride. School authorities are discovering that adequate light is essential both to the learning process and to health.

Commercial applications of electrical heat are growing rapidly. These include electric cooking, electric water heating and electric space heating.

Up to now, commercial air conditioning has been retarded by high construction costs, lack of power and lack of suitable equipment. It is my conviction that these obstacles are now being surmounted. The future growth of air conditioning, it seems to me, will depend solely upon aggressive selling.

Large commercial buildings, such as office buildings, will use increasing amounts of power for elevators, electric stairways, air conditioning, lighting and electrical office equipment.

Hotels are due to show a similar growth. In fact, I feel certain, from many isolated bits of evidence, that we are on the path not only to the all-electric home, but to an all-electric restaurant, the all-electric barber shop and beauty parlor, and all-electric office building, the all-electric hotel and many other types of commercial establishments.

These things add up to a commercial power market that nobody can stop.

It Takes Trained Salesmen

Finally, let us explore the market for Specified Buying. Industrial activity will continue to fluctuate, despite governmental attempts at stabilization. However, the general trend will continue upward.

Specified Buying of electrical equipment requires so much knowledge to sell that it can best be done only with highly trained company sales personnel. All manufacturers of electrical apparatus have increased their sales force since the War. I don't know how long it has taken them to train these men to their satisfaction, but I will confess to you it has taken us several years and we are not through yet.

I mention these things because if you feel you want to expand your own industrial sales staff later it would be wise to start now. If our experience is typical, it will take you several years to find and train men so they can do an effective job for you.

Manufacturers want to help you in the training of your salesmen. An example is the Industrial Electric Heating School which we have just conducted for 160 utility power salesmen, in cooperation with the Edison Electric Institute.

In sales campaigns for specified products, greater emphasis than ever is being placed on customer meetings. Two examples of this are the G. E. show, "More Power to America," and our own "Productive Power Show." Both are designed to demonstrate to industry executives the many electrical ways of producing faster, better and cheaper.

**Excerpts from an address entitled "It Takes Sales Power to Sell Electric Power," delivered before the Southeastern Electric Exchange, White Sulphur Springs, W. Va., April 13th, 1950.*

National Association of Electrical Distributors

FORTY-SECOND ANNUAL CONVENTION

Convention Hall—Atlantic City, New Jersey
June 11-16, 1950

ADMISSION BY BADGE ONLY—TO ALL CONVENTION SESSIONS, CONFERENCE BOOTH CENTER AND MATERIALS HANDLING EXHIBIT.

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H. D. RODEN—Roden Electrical Supply Co., Knoxville.
E. J. RUETH—Frankelite Co., Cleveland.
I. W. DANFORTH—Danforth Company, Pittsburgh.
F. R. EISEMAN, SR.—Revere Electric Supply Co., Chicago.
HARRY ALTER—The Harry Alter Co., Inc., Chicago.
FRANK ARGAST—Farrell-Argast Electric Co., Indianapolis.
W. E. GUY—Graybar Electric Co., Inc., Chicago.
TITUS B. SCHMID—Crescent Electric Supply Co., Dubuque.
K. G. GILLESPIE—Jenkins, Wholesale Division, Kansas City.
J. P. HAMBLEN—Southern Electric Supply Co., Houston.
C. M. MACKEY—Westinghouse Electric Supply Co., Dallas.
E. E. BUERKEL—Incandescent Supply Co., San Francisco.
F. G. GOSS—(Chairman—Pacific Zone)—Electric Supplies Distributing Co., San Diego.
W. M. JEWELL—Westinghouse Electric Supply Co., Seattle.
E. B. INGRAHAM—Times Appliance Co., Inc., New York.
R. J. BROWN—General Electric Supply Corp., Bridgeport.
JOHN M. NEWTON—Oakes Electrical Supply Co., Holyoke.
D. M. SALSBURY—Westinghouse Electric Supply Co., New York.
G. F. HESSLER—Graybar Electric Co., Inc., New York.
C. E. MASON—Novelty Electric Co., Philadelphia.
R. M. JOHANNESEN—(Vice Chairman of Board)—Johannesen Electric Co., Inc., Greensboro.
W. G. PEIRCE, JR.—(Vice Chairman of Board)—Peirce-Phelps, Inc., Philadelphia.

SUNDAY—JUNE 11, 1950

Hotel Traymore—Meeting of Board of Governors.

Afternoon

1:00—Registration in the Main Lobby of Convention Hall.

MONDAY—JUNE 12, 1950

Morning

9:00—Registration in the Main Lobby of Convention Hall.

10:00 to 12:00 Noon—Conference Booth Center and Materials Handling Exhibit open.

10:30—Meeting of Industrial and Commercial Lighting Committee.

Afternoon

2:00—Session for Members and Guests.

MEETING OF APPARATUS AND SUPPLY DIVISION

Mr. R. M. Johannesen, Chairman.

Opening address—Mr. Charles E. Wilson, president of General Electric Company.

Panel Discussions.

4:30 to 6:30—Conference Booth Center and Materials Handling Exhibit open.

TUESDAY—JUNE 13, 1950

Morning

8:30—Registration in the Main Lobby of Convention Hall.

9:30—Session for Members and Guests.

MEETING OF APPARATUS AND SUPPLY DIVISION

Mr. R. M. Johannesen, Chairman.

Address—Mr. R. Stafford Edwards, president of Edwards and Company, Inc.

Report of Industrial and Commercial Lighting Committee—Mr. L. E. Barrett, Chairman.

A Special Presentation—(Under the auspices of the Industrial and Commercial Lighting Equipment Section of NEMA.)

"An entertaining and dramatic approach to better marketing of lighting by distributors. This show will employ an all professional cast under the direction of the internationally known theatrical agency, Sherman Dryer Production. These people have been able to explain to the public the mysteries of atomic energy and the Einstein principle. They will undertake their toughest assignment, when they try to show members of N.A.E.D. how to be successful in the sale of lighting Come and be amused as well as amazed."

Afternoon

2:00—Session for Members and Guests.

MEETING OF APPARATUS AND SUPPLY DIVISION

Mr. R. M. Johannesen, Chairman.

Address—Mr. N. J. MacDonald, Vice President of the Thomas & Betts Co., Inc.

Panel Discussions.

Address—"Private Enterprise at the Crossroads"—Dr. Edward F. Willett, Department of Economics, Smith College, Northampton, Massachusetts.

4:15—Elections—Apparatus and Supply Division.

Mr. R. M. Johannesen, Chairman, Apparatus and Supply Division, presiding.

4:30 to 6:30—Conference Booth Center and Materials Handling Exhibit open.

Evening

7:00—Hotel Traymore—N.A.E.D. Father and Son Dinner. (For Members Only.)

WEDNESDAY—JUNE 14, 1950

Morning

8:30—Registration in the Main Lobby of Convention Hall.

9:30—Session for Members and Guests.

GENERAL CONVENTION SESSION

Apparatus and Supply Division—Appliance Division—Mr. D. M. Salsbury, President, presiding.

Address of Welcome—Mr. Charles G. Pyle.

Address of President—Mr. D. M. Salsbury.

Presentation of Certificates of Honorary Life Membership.

Presentation of Junior Achievement Award by Mr. Francis E. Stern, Chairman, Junior Achievement Committee.

Address—"Electrical Products Distribution, Yesterday-Today-Tomorrow, 1900-1950-2000"—Mr. O. Fred. Rost, Editor of ELECTRICAL WHOLESALING.

Report of Association's Counsel—Kendall B. DeBevoise, Esq.

Report of Finance Committee—Mr. A. H. Nicoll, Chairman.

Address—"Nothing Happens Until Somebody Sells Something!"—Mr. Arthur H. (Red) Motley, President of Parade Publication, Inc.

Afternoon

12:15—Elections—Appliance Division—Mr. W. G. Peirce Jr., chairman, Appliance Division, presiding.

12:30—Election Meetings for N.A.E.D. Zones.

1:30—Hotel Traymore—Luncheon and Organization Meeting of Board of Governors.

2:00 to 5:00—Conference Booth Center and Materials Handling Exhibit open.

Evening

6:30 to 8:00—Hotel Traymore—Annual Cocktail Party for all Members and Guests.

THURSDAY—JUNE 15, 1950

Morning

8:30—Registration in the Main Lobby of Convention Hall.

9:30—Session for Members and Guests.

MEETING OF APPLIANCE DIVISION

Mr. W. G. Peirce, Jr., Chairman.

Address—"The New Radio-Television Distribution Patterns"—Mr. Joseph B. Elliott, Vice President in charge of RCA Victor Consumer Products, Radio Corporation of America.

Report of Convention Resolutions Committee—Mr. Harry Alter, chairman.

Afternoon

2:00—Session for Members and Guests.

MEETING OF APPLIANCE DIVISION

Mr. W. G. Peirce, Jr., Chairman.

Address—Mr. G. P. F. Smith, President of Norge Division, Borg-Warner Corporation.

Panel Discussions.

4:30 to 6:30—Conference Booth Center and Materials Handling Exhibit open.

Evening

6:30—Hotel Traymore—Board of Governors Reception and Dinner for Honorary Life Members.

FRIDAY—JUNE 16, 1950

Morning

9:30—Session for Members and Guests.

MEETING OF APPLIANCE DIVISION

Mr. W. G. Peirce, Jr., Chairman.

Address—Mr. W. E. O'Brien, General Sales Manager of Toastmaster Products Division, McGraw Electric Company.

Special presentation of the Warehousing Committee—Mr. A. J. Parsons, chairman.

Panel Discussions.

Adjournment.

SPECIAL INTEREST FEATURES

CONFERENCE BOOTH CENTER—Main Arena—Convention Hall.

MATERIALS HANDLING EXHIBIT—Main Arena—Convention Hall.

An INFORMATION POST will be maintained in the Main arena of the Convention Hall by The Saturday Evening Post for the convenience of members and guests attending the Convention. The Information Post will feature a paging service, telephone service, secretarial service, and general information center.

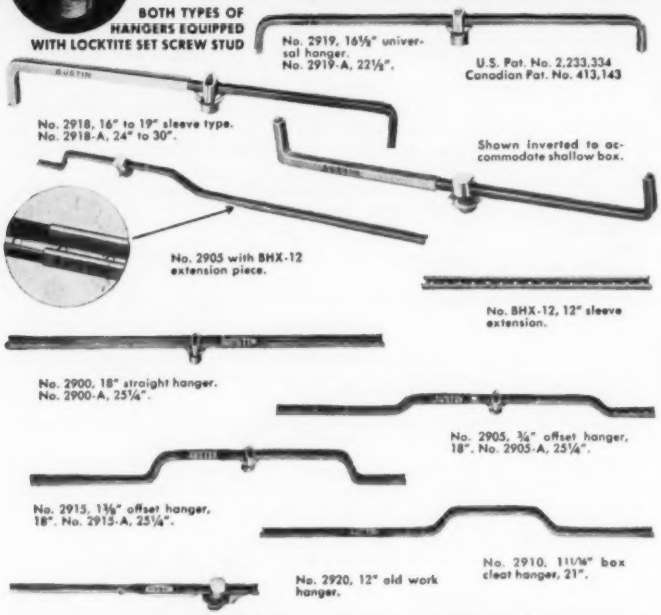
LADIES' BINGO PARTY—Hotel Traymore Sun Deck on Wednesday, June 14, at 3:00 P.M.

AUSTIN BOX HANGERS CHANNEL AND SOLID TYPES...
A HANGER FOR EVERY JOB!

BOTH TYPES OF HANGERS EQUIPPED WITH LOCKTITE SET SCREW STUD

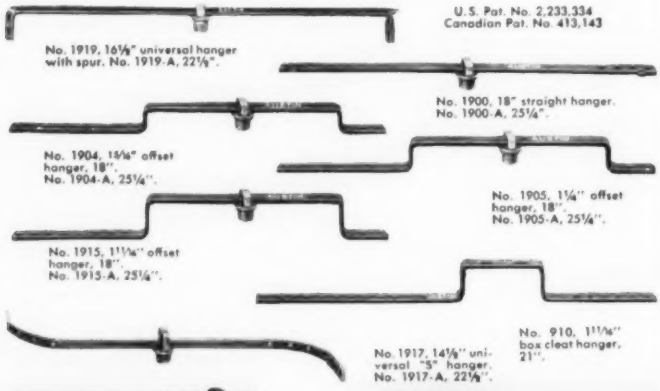
STEEL CHANNEL BOX HANGERS

Stronger, Lighter, Easier to Handle . . . Give Perfect Alignment, Complete Flexibility



SOLID STEEL BOX HANGERS

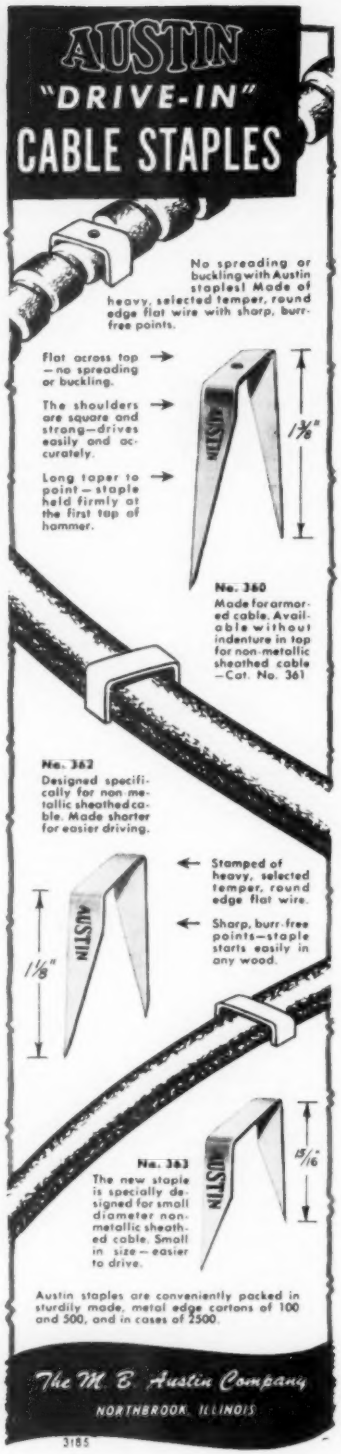
Position Quickly, Easily, Accurately



The M. B. Austin Company
NORTHBROOK, ILLINOIS

Write for Information and Prices.

AUSTIN "DRIVE-IN" CABLE STAPLES



The M. B. Austin Company
NORTHBROOK, ILLINOIS

3185

Help Your Dealers Get More Sales Through Better Use of Displays

ONE element in the competitive picture, sometimes overlooked by the electrical wholesaler's salesman in the zest of chasing down orders, is selling dealers more goods by selling them on the definite sales help they can gain through the wise and full use of display material.

Much time, thought and money has been spent, is now being spent and will continue to be spent by aggressive manufacturers everywhere on point-of-sale material that will increase turnover for the dealer.

It will profit the electrical distributor's salesman to see that this material is used—correctly and timely used—by his dealers. Effective displays can mean more sales for the retailer and increased orders for the wholesale salesman.

What are displays. They are sales tools; devices which can make more attention-compelling and productive the cubic foot area of a retail store. Full of eye-appeal, they dramatize merchandise and help transform a prospect into a purchaser. Properly used, displays pick up where consumer advertising has left off, carry the sales ball to the retail salesman and if he is good, he takes it from there to the cash register.

Displays, basically, do two things: Show the product and present one or all of its outstanding features. They range from simple cardboard cutouts carrying an advertising message to complicated devices which mechanically demonstrate a product. Some are so arranged to allow a prospect to actually try the item promoted; others act as self-merchandisers, selling products as well as displaying them.

Display material is not the sudden offspring of haphazard thinking or snap decisions; it is material that is tried and tested long before it reaches the dealer's hands.

Why use displays. "Out of sight is out of mind" and what the prospective buyer does not see he will not buy. But with the help of properly used display material, a retailer has plenty of assurance that his wares will be seen and more readily bought.

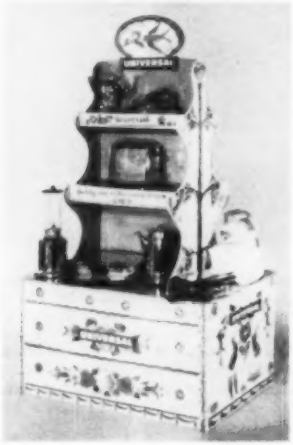
What's more, good retail displays can accomplish the following:

1. Capitalize on the traffic going through a store because they are generally exciting, imaginative, and full of good, sound selling sense.
2. Provide important selling information and highlight the outstanding and superior mechanical features of the products.
3. "Pipe-in" the force of national and local consumer advertising at the point of availability.
4. Tend to lend freshness and newness to the stock.
5. Keep the retail salesmen posted on selling points and their proper sequence in presentation.
6. Capitalize on the fact that 85 per cent of all purchases are made as the result of eye-appeal.

Correct display at the point of

APPLIANCES. This hutch cupboard display has a gaily decorated motif in eight colors created by artist Peter Hunt. A complete walk-around display, it is five feet high and is completely self supporting. Unit is designed for use with complete assortment of Universal electric housewares and interchangeable cards that tie in with spring and summer sales events. Landers, Frary & Clark, New Britain, Conn.

FAN. This motion display is constructed of heavy-durable cardboard and is easily assembled. It portrays an overheated ostrich attempting to escape the sun's rays and is motivated by the oscillation of a 12-inch fan. Designed for window, counter, or sales floor use, the unit includes a supply of promotional material stressing the features, ratings and prices of the manufacturer's line. Robbins & Myers, Inc., Springfield, Ohio.



SCREW DRIVERS. This metal display is of the self-merchandising type and is designed for wall use. Constructed of metal, unit is finished in orange and blue. It holds an assortment of screw drivers and wood chisels to cover the needs of mechanics, electricians, plumbers and home owners. Tools slip out of the display easily; refills can be put in without disturbing display. Prices are conveniently marked. Fuller Tool Co., Inc., 905 Faile St., Bronx 59, N. Y.

sale is vitally important to the dealer, for at that one place all the elements of the sale—the prospective buyer, the seller and the product—are brought together face to face.

Where to use displays. They can be put to effective use throughout a store. Displays, depending upon their size and construction, are designed for one or several specific locations. Some are intended for use on counters, walls, shelves, or show windows—or perhaps at any of these places. Others are meant for floor use only.

The cardinal rule to follow in setting up display material is this: Strive for simplicity. The net results of too many displays in close proximity are confusion and division of the prospect's attention.

When to use displays. At least twelve months out of every year. Tucked away in the back of the

ELECTRIC CLOCKS. To announce two new clock assortments Telechron, Inc., has introduced its "Tell-Sell" clock display for window, show case, or counter use. Lithographed, the three-dimensioned cardboard display is 18" high, 21" wide and 17" deep; locks clocks to display and conceals cords; holds four clocks. Telechron, Inc., 252 Main St., Ashland, Mass.

LAMP ADAPTER. Four-color, die-cut, three-unit display for its oil lamp adapters and Candle Flame and Candylbeme lamps has been announced by North American Electric Lamp Co., 1014 Tyler St., St. Louis, Mo. An actual size converted oil lamp is reproduced, die-cut, in the center piece with perforations for displaying three types of adapters. Smaller side panel units display two types of lamps. Designed for counter use, the display shows how the three types of adapters are used in converting oil lamps to electric lamps.

JUICER. Display counter constructed of blond birchwood and trimmed in chrome occupies a floor area of only 32" by 40" and is 48 inches in height. Lighted by four fluorescent lamps the display has sliding panel doors in base where space is provided for stock storage. For full details write National Die Casting Co., Touhy Avenue at Lawndale, Chicago 45, Ill.

FUSES. Plastic case to hold and display the Littelfuse electronic assortment of fuses and holders. Divided into handy compartments the plastic box is permanent and can be refilled many times; easy to check stock visually. Fuses and holders packed in the case have been carefully selected to cover the most frequent needs. Littlefuse, Inc., 4757 N. Ravenswood Ave., Chicago 44, Ill.

FOOD MIXER. A four-color display is provided for this food mixer when the cover of this gift box is raised. Sales features of the mixer are illustrated on the inside cover and the box is finished in silver foil. Hamilton Beach Co., Racine, Wis., has announced this new dual-purpose carton for store or window display use or for carry-home by the purchaser.

FRICTION TAPE. Metal display cabinet 18" high, 13" wide and 4½" deep is designed to hold a varied assortment of friction tape on the counter. Advertising message at top of display allows space for inserting prices of tape. Holds four sizes of tape. Offered complete with six dozen rolls of friction tape. Plymouth Rubber Co., Canton, Mass.

store or gathering dust in the stockroom, display material renders no service whatsoever. But properly used, it will work for a merchant all day and as far into the night as he keeps his show windows lighted.

Timeliness is important. Much display material is tied-into seasons, holidays or events. Moreover, many products—electric fans, Christmas lamps, etc.—have their specific selling seasons. Consequently, displays should be at work promoting a product some weeks before and during its season; never after. A portable fan display in the show window seems a bit silly when the first frost is on the ground.

Another guide for good display is variety. A display that is unchanged for a long period of time is as stale as last week's bread. People can always be attracted by new things, new ideas—and new displays.

FLASHLIGHT BATTERIES. Two counter cartons carry two-color theme and symbolic red-headed Burgess zebra featured in national advertising campaigns. The merchandisers come in 12-cell and 48-cell sizes. The 12-cell carton displays batteries in upright position; 48-cell carton shows the batteries on their sides. Burgess Battery Co., Freeport, Ill.

LAMPHOLDERS. This three-colored counter display illustrates suggested uses for sealed beam flood and spot lampholders around the home for decorative lighting, lighting for safety and utility, and lighting for outdoor night time recreation. Unit is designed as an all-year-round retail promotion piece. Steber Manufacturing Co., Broadview, Ill.

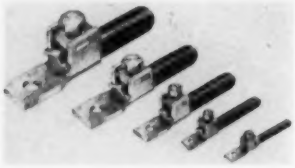
FILTER RODS. This display carton, designed for use as a counter dispenser, holds twelve coffee brewer filter rods. Unit measures 8½ by 8¼ inches and stands 10 inches high. Top folds back into a two-color illustration with the filter rod fitting into die cut slots showing it in its actual working position. Cory Corp., 221 N. La Salle St., Chicago, Ill.

PUSH BUTTONS. This display features ten push buttons and push bars mounted for permanent display and demonstration on a durable board for counter, wall, or window use. Completely assembled, the unit is provided with eyelets for hanging and an easel for counter or window promotion. Display sets up in 12 inches of space. Trine Manufacturing Corp., 1430 Ferris Place, New York 61, N. Y.

INCANDESCENT LAMPS. This package merchandiser contains an assortment of 124 incandescent lamps in six sizes. The package contains an envelope of displays, including pennants which wrap around the box, an easel card which slips over the back of the case, window display material, counter card, and streamers for use in the store. Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.

AIR CONDITIONING UNIT. This display unit simulates an actual installation of a room air conditioning unit in a home. Effect is heightened by showing summer scene through simulated window with pedestrian wiping perspiration from brow. Selling features are presented below air conditioning unit which is built into the display. Mitchell Manufacturing Co., 2525 Clybourn Ave., Chicago 14, Ill.

NEW PRODUCTS you can SELL



PRESSURE CONNECTORS

These five lug models comprise a line of pressure connectors for use with copper, aluminum or steel wire in sizes from 14 AWG. to 500 MCM. The tightening bolt, guide nut and contact pad of each connector are made of steel. The lug body is formed of hard-drawn electrolytic copper. Entire unit is cadmium plated and each is a complete assembly, according to the manufacturer. The three smaller sizes can be installed with a screwdriver; the two larger units with a wrench. The connectors are listed by Underwriters' Laboratories, Inc.

● POTENTIAL MARKETS: Electrical contractors. Industrial, commercial institutional, rural and residential buyers. National Electric Products Corp., Chamber of Commerce Building, Pittsburgh 19, Pa.

◆

ELECTRICIAN'S TOOL

This tool for making solderless electrical connections is capable of splicing all wire combinations from two #18 to three #8 and terminating all wire sizes from #16 to #8, according to the manufacturer. It incorporates a four-way crimping action which is designed to be equally effective on solid, stranded, or combinations of solid and stranded wires. Tool weighs one pound.

● POTENTIAL MARKETS: Electrical contractors. Commercial and industrial buyers. Buchanan Electrical Products Corp., 1290 Central Ave., Hillside, N. J.

BUS DUCT

Designed for outdoor or indoor service, a bus duct is intended for high-voltage installation. Features include: All electrical connections are bolted with silver-plated surfaces; enclosures consist of non-magnetic housing with gasketed covers and joints; expansion joints are furnished in housing and bus wherever necessary; copper ground is provided; necessary protective and/or metering apparatus can be applied wherever required. Bus is mounted on insulators of maximum strength, spaced and braced to withstand the full mechanical forces that might result from phase to phase or phase to ground faults, according to the manufacturer.

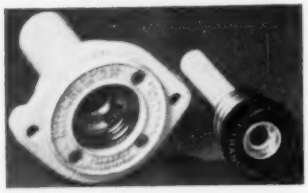
● POTENTIAL MARKETS: Utilities. Unit is engineered to individual requirements of buyers. Federal Electric Products Co., Cole Electric Products Div., 4300 Crescent St., Long Island City 1, N. Y.

◆

INCANDESCENT FIXTURE

A feature of this recessed incandescent fixture is the running of rubber covered wire directly to the fixture; asbestos wire is not required. An insulated junction box on the side of the fixture keeps the heat below the 60° C. limit for rubber covered wire. Underwriters' Laboratories have approved the feature for ordinary construction and does not limit it to fire-resistant buildings. The need for carpenter work is eliminated by mounting ears on the boxes and the use of bar hangers which staple to the joists.

● POTENTIAL MARKETS: Electrical contractors. Commercial, institutional and industrial buyers. The Kirlin Co., 3435 E. Jefferson Ave., Detroit 7, Mich.



CIRCUIT PROTECTOR

A secondary-operated primary opening, this circuit protector is designed for use with gas tubes in high-voltage circuits. It consists of a permanent, porcelain receptacle and a non-renewable fuse which screws into the receptacle. Primary of the fuse is 7 amperes at 125 volts or less, with secondary ratings of 7,500, 9,000, 12,000 and 15,000 volts available. Manufacturer states that the fuse will blow if there is (1) a broken or leaky tube, (2) too much tubing for the transformer, (3) an open circuit in the sign wiring, (4) incorrect gas pressure in the tubing. Both receptacle and fuse are approved by Underwriters' Laboratories, Inc.

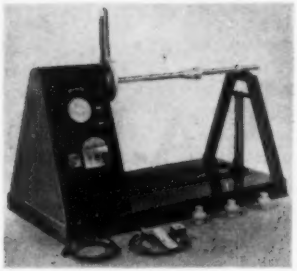
● POTENTIAL MARKETS: Electrical contractors. Commercial and industrial buyers. Recommended by the manufacturer for use in protecting outdoor and indoor gas-tube signs, outline lighting and inside lighting; acting to protect signs against open-circuit or overload operation and to reduce fire hazard by limiting maximum voltage to that of the capacity of the transformer. Economy Fuse and Manufacturing Co., 2717 Greenview Ave., Chicago 14, Ill.

◆

MASONRY DRILL

Wound with durable wire that spirals out the dust and chips automatically, this drill for masonry, brick, tile, concrete, etc., is available in round shank styles from 1/4-in. to 1-in. sizes inclusive. The bits can be used in any slow-speed rotary drill, according to the manufacturer.

● POTENTIAL MARKETS: Electrical contractors. Industrial and commercial buyers. The Paine Co., 2947 Carroll Ave., Chicago 12, Ill.

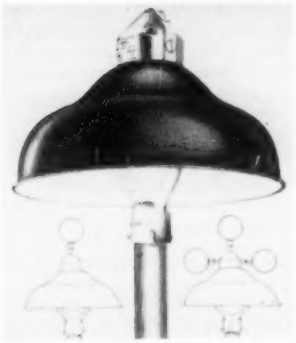


CABLE REEL

Designed to expedite distributor handling of all types of wire and cable, this automatic reel permits a single operator to transfer quickly accurately-measured lengths of cable, wire rope, messenger strand, etc., from pay-out to take-up reel, according to the manufacturer. It is equipped with two 110-volt a.c. motors for plug-in operation on standard lighting circuits. A control lever is provided to raise and lower take-up reels on the motor-driven loading platform, while the driving arm is foot-pedal operated with interlocking controls, four driving speeds, and self-aligning driving pin designed to fit all makes of reels.

● POTENTIAL MARKETS: Large electrical contracting firms, mines, quarries, etc. Marion Electric Co., 21650 Wyoming, Detroit 20, Mich.

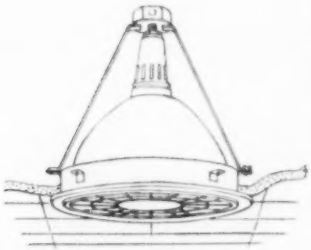
EXPERIMENTAL sun-heat coin machine was designed to illustrate a possible use of sun and heat lamps. Illuminating engineers point out that the effectiveness of a sun lamp is greatly increased when it is used in conjunction with a heat lamp, which conditions the skin for tanning by causing a mild perspiration. Coin-operated machines such as these are seen as having application in hotel rooms, doctors' and dentists' waiting rooms, beauty shops, lounges, railroad and bus terminals, etc. General Electric Co., Nela Park, Cleveland 12, Ohio.



COLUMN LIGHT

This column light has a porcelain-enameled steel reflector that is 20½ inches in diameter. All wiring is fully enclosed inside a double-yoke hollow-arm construction that supports a built-in weatherproof cast aluminum splice box to which supplementary spot or floodlights can be added. The dome splice box is threaded to take up to five cluster lights and has a removable cast aluminum cover. The column light is designed for normal base-up burning of 300 and 500-watt standard line lamps or for bi-post lamps in the 500, 750 and 1000-watt sizes.

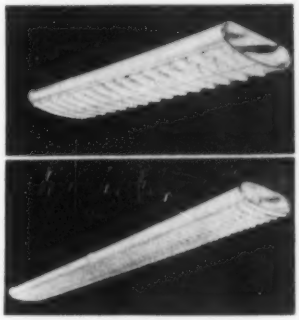
● POTENTIAL MARKETS: Electrical contractors. Commercial, industrial and institutional buyers. Recommended by the manufacturer for use at gasoline stations, parking places, playgrounds, railroad platforms, factory yards, parkways, etc. Stone Manufacturing Co., 489 Henry St., Elizabeth, N. J.



GYMNASIUM LIGHTING UNITS

Line of "Alzak" aluminum high bay gymnasium lighting units is available in both exposed and recessed types. Units have reflectors engineered for 60-degree beam and are protected with heavy-gauge wire guards. They may be used with or without concentric louvers for shielding. Recessed types are hinged in plaster ring for servicing and cleaning from above. Exposed types have hinged bottoms. Lamps may also be changed, from below, through the center hole in the wire guard.

● POTENTIAL MARKETS: Electrical contractors. Institutional and commercial buyers. The Edwin F. Guth Co., 2615 Washington Ave., St. Louis 3, Mo.



FLUORESCENT FIXTURES

Two units of a series of 13 matching fluorescent fixtures illustrate both the four-lamp standard start version (top) with 25-degree lengthwise shielding and the eight-foot two-lamp instant start version (bottom) with 45-degree lengthwise shielding. All units have a crosswise cut-off angle of 35 degrees. All accessories are common to the entire line with the exception of the end caps, which are interchangeable within either the two-lamp or four lamp groups. Fixtures can be mounted individually or in continuous rows directly on the ceiling or suspended from it.

● POTENTIAL MARKETS: Electrical contractors. Commercial and institutional buyers. Recommended by the manufacturer for use in all types and sizes of stores, schools and offices. Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.

News Notes from N.A.E.D.

By Alfred Byers

Assistant Managing Director and Secretary
National Association of Electrical Distributors

THE FORTY SECOND

In just a few weeks, the stellar attraction at Atlantic City will be N.A.E.D.'s 42nd Annual Convention. Actually, there will be two conventions. The first will be the Convention of N.A.E.D.'s Apparatus and Supply Division, with division chairman and N.A.E.D.'s vice president, R. M. Johannesen presiding, on June 12th and 13th. N.A.E.D.'s Appliance Division, headed by W. G. Peirce, Jr., N.A.E.D.'s other vice president, will be in session June 15th and 16th. In between, on June 14th, N.A.E.D.'s president, D. M. Salsbury, will preside over the Association's general convention session of members and guests of both Divisions.

As usual, members will pay no registration, but rather will be reimbursed their transportation costs —a significant characteristic of N.A.E.D.—and unusual in trade convention practice. Also, as usual, manufacturers will be assessed a registration fee of $50.00 per man. Differing from the usual, however, the registration fee for non-member distributors will be $50.00, this year. The Board of Governors, when establishing this amount, considered it only a reasonable token payment for the many practical advantages gained by all who attend.

Striving to equal, and excel if possible, the highly successful N.A.E.D. Conventions of recent years, the Program Committee has outdone itself in arranging a program, not sprinkled, but literally saturated with nationally famous industry leaders and special attractions. Elsewhere in this issue the program is given in detail. No wonder the advance reservations are hitting a new high.

N.A.E.D.'s "42nd in '50" will be a mid-century high-spot in the industry's progress!

COMMITTEES AT WORK

Committees have been working hard during the past several months. Meetings have been held covering commodities in the fields of wire and cable and armored conductor; apparatus and control; wiring devices; conduit fittings and boxes; residential lighting; conduit, outside construction materials; and fans and ventilating equipment; major appliances; radio, television and tubes; and electric housewares.

Not only have these committees dealt with problems peculiar to their product scope and published reports of their meetings to the membership, but they have also made special preparations for their participation in the Atlantic City Convention. Their plans call for some unusual and surprising presentations. There will be no reading of already published reports. Every indication now points to the panel sessions at the Convention as one of the most enjoyable and informative of all the features to be offered.

FATHER AND SON DINNER

When N.A.E.D. members and their sons who are active in their companies gather for the Father and Son Dinner on Tuesday evening of Convention week, another bit of N.A.E.D. history will be made. It will bring together for the first time, in an organized manner, the many N.A.E.D. members and the sons they are training to succeed them in carrying on their enterprises.

This should prove to be an occasion of great significance, this gathering of N.A.E.D.'s present stalwarts and their sons, the N.A.E.D.'ers to be. The special committee of fathers and sons, which has completed the program for that event, actually has made a major contribution to the advancement of the Association and the great industry it represents, by their constructive efforts. We predict, as the high priced commentators say, that a number of new and life-long friendships will begin on June 13th at Atlantic City.

AREA MEETING AT BOSTON

Members of N.A.E.D. in Zone 1, New England, attended an Association Area meeting at the Engineer's Club, in Boston on April 26th. Messrs. Pyle, Byers, and Pritchard were present from headquarters. The N.A.E.D. programs were fully discussed as were suggestions for new activities, to be undertaken. This was the last of the 1949-1950 fall and winter series of N.A.E.D. Area Meetings.

MEMBERSHIP

As the Association's Annual Convention date nears, it is heartening to report that the field efforts of J. G. Johannesen, as special con-

sultant to headquarters, and Phil. Pritchard, N.A.E.D.'s new special representative, are bearing fruit. New members in the Appliance Division and in the Apparatus and Supply Division are being enrolled steadily. Former members are being reinstated and new names are being added to the roster.

This work of telling the N.A.E.D. story to distributors, over their own desks, is an important one for the good of the industry. Messrs. Johannesen and Pritchard are doing it well. Their addition to the staff augments, at a most favorable time, the efforts, in this respect, of Managing Director Charles G. Pyle, and your reporter who necessarily can devote to work in the field only a limited time when other pressing administrative duties permit.

N.A.E.D. has grown of late. But, so has our industry. In order to represent distributors adequately in this complex industry it is essential for N.A.E.D. to grow even bigger. As it acquires that greater stature its value to its members correspondingly will enlarge as will its contributions to the welfare of the electrical industry at large.

The membership work progresses favorably; and if conscientious effort by us at "500-5th" is proportionately effective that progress will be notable in the future.

NEWS

(*Continued from page 63*)

new section shall not exceed $5 million. Mortgage insurance up to 95 percent of the replacement cost of the project can be obtained if at least 65 percent of the members are veterans of World War II.

Commissioner Richards expressed the opinion that the cooperative form of undertaking, which has proved successful in a number of other fields, holds promise of providing good housing for groups of veterans and others who desire to band together for this purpose. One of the new aspects of Section 213 is that the FHA is authorized to furnish technical advice and assistance in the planning, development, construction and operations of cooperative projects.

Interest Rates Reduced

Reduction of the maximum interest rate on FHA home mortgages to four and one-fourth percent was jointly announced by Administrator Raymond M. Foley of

Yes, that's right! Only a normal supply of the most popular Swivelite arrangements plus a few basic "Adapt-A-Units" gives you a *complete* display lighting line – lets you fill orders for *any* arrangement right from stock. What a saving in money and stockroom space!

Plenty of sales appeal, too – for faster turnover, bigger profits. Amplex Swivelites have exclusive, easier-action, *double-ball* swivels! Non-tarnishing, non-blistering finish. Cooling, air-flow ventilation. They're the only display lighting fixtures with removable hoods!

Full details in new catalog. Write *today* – Amplex Corporation, Dept. 45 117 Water Street, Brooklyn 1, N. Y.

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Manufacturers of Display Lighting Reflector Lamps • Colorbeam Display Lamps • Spotlights and Floodlights • Fluorescent Tubes • Color Clips and Filters.

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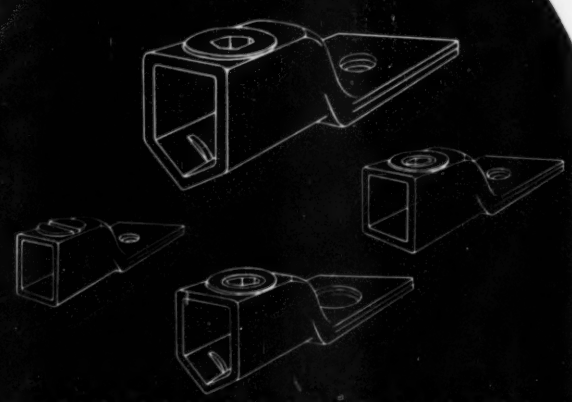

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They take punishment and like it—these one-piece, pure copper lugs which afford brute strength without excessive weight, silver-plated for top performance.

ILSCO { LO SOLDERLESS LUGS

Average 50% COOLER than "Ordinary" lugs.
(Underwriters' approved)

LO SOLDERLESS LUGS are engineered to permit maximum wiring space where space-saving is paramount.

100% re-usable . . . no loss

Each LO lug comes in a wide range of wire sizes from 14# to 600,000 cm.; easy to install with ordinary tools. Cost is much lower than coarse, bulkier cast lugs, although superior in performance.

ILSCO COPPER TUBE & PRODUCTS, INC.
CINCINNATI 27, OHIO

the Housing and Home Finance Agency and Commissioner Franklin D. Richards of the Federal Housing Administration to become effective with respect to all applications received in FHA field offices on and after April 24.

"After months of thoroughly studying the mortgage money market, it was concluded that this lower rate would be effective in producing a high level of residential construction under the FHA program," it was declared by Administrator Foley and Commissioner Richards in a joint statement.

Under the new maximum rate permitted, the FHA will insure only mortgages which bear interest at four and one-fourth percent or less. This interest rate, plus the one-half of one percent insurance premium, makes an overall maximum annual cost of four and three-fourths percent.

Wholesalers Named To Chicago Show Committee

CHICAGO—Harry Alter, president of The Harry Alter Co., wholesale appliance distributing firm of this city, was recently named chairman of the show committee for the Third Annual National Television and Electrical Living Show to be held September 30 through October 8 at the Chicago Coliseum here.

Other electrical wholesalers of this city named to the show committee are: Hilliard Graham, Hyland Electrical Supply Co.; C. W. Paulson, Westinghouse Electric Supply Co.; J. Pettersen, General Electric Supply Corp.

Sponsored by The Electric Association of Chicago, the National Television and Electrical Living Show is an annual event here. Last year's show attracted about 150,000 spectators. Booth space sales for this year's show are already in excess of the 1949 event, it was announced.

Aggressive Selling Trend Noted At EEI Conference

CHICAGO—The 800 persons who attended the recent annual sales conference of the Edison Electric Institute here heard that electric companies are doing more aggressive selling, rebuilding their sales forces, and returning to full or partial merchandising of electrical appliances.

These trends were reported by Harry Restofski, chairman of EEI's commercial division general committee, who stated that division committees are placing special emphasis on providing aids for more aggressive selling.

Another speaker, Jack Lacy, president of the Lacy Sales Institute, said that two-thirds of all sales are made by one-third of the salesmen in a majority of sales

organizations. He described the three basic ways to sell: Narrative selling, which consists of describing the proposition; the use of suggestion; and the powerful method of selling perfected by Socrates which consists of presenting leading questions so that the prospect, of his own volition, arrives at the decision to buy.

Indications were that the present high level of business activity would continue through the third quarter of 1950, Ralph Robey, chief economist of the National Association of Manufacturers, told the EEI conferees. Other speakers included: C. P. Conrad, president of the Iowa-Illinois Gas & Electric Co.; and Maxwell Cole, Philadelphia Electric Co.

North Central Convention Draws 162 Wholesalers

ST. PAUL—The 1950 All-Industry Convention of North Central Electrical Industries, which was held recently in this city, chalked up a record registration of 1,310 persons, including 162 electrical wholesalers.

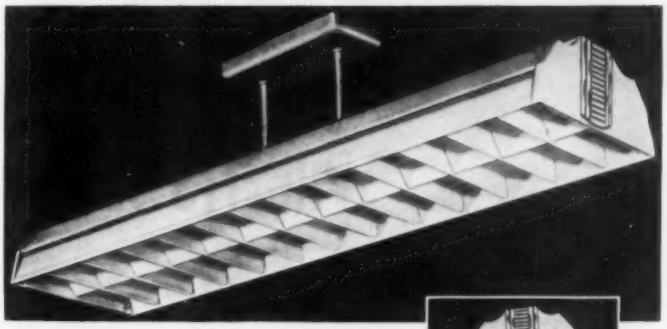
Speakers at the convention included: J. Marty, manager of the Radio and Television Department of The Admiral Corp.; Frank Watts, executive assistant of *The Farm Journal;* E. A. Stewart, Interstate Power Co.; Irving J. Clinton, manager of the Meeker County Electric Cooperative; William Garbisch, president of the Freeborn-Mower Electric Association.

Gov. Luther Youngdahl of Minnesota addressed the 600 persons who attended the convention banquet, commemorating the 50th anniversary of the State Board of Electricity. Immediately preceding the banquet, the following electrical wholesaler and distributor subscribers of North Central Electrical Industries invited the conferees to a "hospitality hour":

Chas. A. Anderson & Co., W. R. Beamish Co., Blaine Electric Co., Coast-to-Coast Stores, P. G. Corcoran Co., Crescent Electric Supply Co., Dakota Electric Supply Co., Electric Supply Co., Ensign Electric Co., Forster Distributing Co., Frigidaire Sales Corp., General Electric Supply Corp., Graybar Electric Co., F. C. Hayer Co., H. A. Holden Co., International Harvester Co., Wm. P. Johnson Co., Kelly-How-Thomson Co., J. H. Larson Co., Lax Electric Co.

Also Marshall-Wells Co., McLaughlin Electric Supply, Midwest Electric Co., Motor Power Equipment Co., Murphy Distributing Co., Northern Electric Co., Northland Electric Supply Co., Our Own Hardware Co., Price Electric Co., Robert Allen Co., Reinhard Brothers Co., W. A. Roosevelt Co., Southern Minnesota Supply Co., Sterling Electric Co., Terminal Electric Co., Tri-State Electric Co., Westinghouse Electric Supply Co.

WHO'S GIVING WHO THE BUSINESS or . . Are you getting your share of school and institutional lighting dollars?



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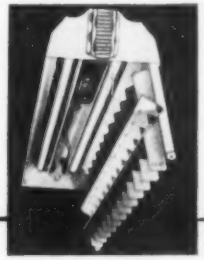
GLARELESS HIGH-POWERED LIGHT IS ESSENTIAL in school rooms, hospitals and institutions. COMPCO'S 60/40 luminaire produces scientifically controlled reflected and diffused illumination with a maximum of efficiency. Illuminated metal sides . . . no dark spots . . . no glass or plastic to crack, discolor, peel or chip.

IT'S A FIXTURE EASY TO MAINTAIN, easy to install, and so completely versatile. Equally adaptable to flush or suspension mounting, singly, or in continuous rows. Louvers swing open from either side for ready access to components and for quick relamping, or can be completely removed without tools.

Also available in 48" SLIMLINE (Model 644), and 96" SLIMLINE (Model 648)

48" long, 12½" wide, 5½" deep. Has beautiful ornamental ends of satin finished chrome which can be easily removed for continuous row mounting.



EXTRA COMPCO QUALITY AT NO EXTRA COST

You can't see it here, but once you lay your eyes on a COMPCO fixture you'll see what we mean by *extra* COMPCO QUALITY. It's there in the attention to fabricating details, in the hardware, in the wiring, in the nationally known and recognized components. Yes, important too, is the integrity of a company that backs up its products with a rock-bound guarantee of performance. And, you'll buy COMPCO products at competitive prices. *Write for our catalog and see.*

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Sell the FULL IDEAL LINE and watch your PROFITS JUMP!

Sure, there are big profits for you in IDEAL — even if you only sold a few of the scores of items in the line. But you strike *the real profit bonanza* when you sell the *full* line... It's BIG and its market is BIG — just about as broad as industry! Profit margins are *liberal*. It's the nationally advertised line; year-in-year-out IDEAL helps spot prospects for you through advertising in leading industrial magazines and by "bull's-eye" direct mail. Right down to their metal-edged packages, IDEAL products are built to sell because they're built to help your customer... Below are just some of the IDEAL products that can help you to substantially higher profits in this year and *every* year. Get your share of this big volume business. *Sell the full line.*

"WIRE-NUTS"® and WIRING TOOLS

"Wire-Nuts" — the patented,* solderless, tapeless wire connectors — have been the contractor's and industry's standard for over 20 years. Wiring tools include: B-X cable cutters — voltage testers — fish tape, reels and pullers — fuse reducers — fuse clip clamps — test lites — fuse pullers — cable rippers—joist borers—wire skinners—FLUR-TEST fluorescent fixture testers.

THERMO-GRIPS®

Resistance heating principle soldering tools that make difficult soldering jobs in production or maintenance easy. Sizes for every job.

WIRE STRIPPERS

Production — Brush —bench—rotary and lever types. Also famous "Stripmaster" hand type.

*Patented No. 1,933,555

CLEANERS

Hand-type vacuum cleaners — sprayers — blowers — dryers — pop-corn blowers. All-purpose tank-type cleaners for industrial cleaning, scrap-collection, water pick-up.

MOTOR MAINTENANCE EQUIPMENT

Commutator and slip ring resurfacers — commutator cleaners — brush seaters—precision grinders — mica undercutters — commutator saws — coil winder drives and heads — insulation testers — growlers.

MACHINERY PRODUCTS

Live centers to speed and improve lathe output — electric etchers—dust collectors — tachometers — demagnetizers — "Xpand-O-Lap" self-expanding laps.

IDEAL

Sold Through America's Leading Distributors

IDEAL INDUSTRIES Inc., Sycamore, Illinois

First Planned Lighting Clinic Staged in N. J.

ELIZABETH, N. J.—Approximately 900 customers and members of the lighting trade attended the recent Planned Lighting Clinic held in the Elk's Auditorium in this city. It was the premier showing of a series of such clinics to be conducted during 1950 and 1951 in the eastern United States.

Sponsored by the Public Service Electric and Gas Co. and coming directly from the General Electric Lighting Institute at Nela Park, the clinic was given for persons in the Union County (N. J.) area of Public Service territory. Co-sponsors with Public Service were manufacturers and distributors of lighting fixtures, together with the Union County Electrical Contractors' Association, Union County Society of Architects, and the Chamber of Commerce of Eastern Union County.

"Doctors of Illumination" from Nela Park served as "faculty members" and gave illustrated talks to cover modern lighting techniques in the store, office, school and industrial fields. "Seeing-is believing" educational techniques were outstanding features of all the demonstrations. Only one kind of lighting was exhibited and discussed at each of the seven sessions.

Specific sessions were held on lighting for industry, stores, offices and schools. In addition to these, special sessions of particular value to architects, electrical contractors and parent-teacher associations were also conducted.

The entire seating area was enclosed on three sides by 21 booths with exhibits displaying the newest lighting fixtures in specific lighting needs. The displays in these booths were changed for each session in order to supplement the talks of the lighting specialists at the session, whether it was on lighting for seeing, selling, production, or visual efficiency.

Time was included in each session for questions from the floor and discussion of lighting problems with the speaker. All booths were staffed continuously by manufacturers' representatives.

Gould-Farmer Purchases New Building For Branch

BINGHAMTON, N. Y. — Gould-Farmer Co., Inc., electrical wholesaling firm with its main house in Syracuse, N. Y., recently purchased a building at 76 Robinson Street in this city. The company now operates a branch outlet at 114 Chenango Street in Binghamton, which will begin operations from the new building shortly.

According to J. A. Luce, manager, the firm will be able to operate at one point and under one roof here.

EXECUTIVES and salesmen of the Midland Electric Co., electrical wholesaling firm of Cleveland, O.

Wholesaler's Open House Attended By Over 1,500

CLEVELAND—The Midland Electric Co., electrical wholesaling firm of this city, recently held an open house for its dealer, contractor and industrial customers. The four-day attendance was estimated at over 1,500 persons.

Approximately 75 manufacturers' representatives manned displays of their products, supplying the open house guests with product literature and information.

It was learned that Midland plans to hold an open house annually in order to promote better personal and business relations between supplier, wholesaler and customer. Officers of the Midland Electric Co. include: John U. Walker, president; Morris Sacks, treasurer and general manager; Howard C. Herron, sales manager.

Six New Appointments Announced By Graybar

NEW YORK—The appointments of three district operating managers, two district credit managers and the manager of its rural lines department were announced recently by the Graybar Electric Co.

The newly-appointed district operating managers and their districts are: N. M. White, Philadelphia; W. E. Haynes, Dallas; and A. C. Wehman, Minneapolis.

Mr. White will be responsible for the service, accounting and warehousing functions in the Graybar Philadelphia house as well as at the Allentown, Harrisburg and Reading, Pa.; Washington, D. C.; Baltimore, Md.; and Wilmington, Del., branch houses. Formerly Graybar's Dallas district operating manager, he succeeds D. J. Hanman, who retired.

Succeeding Mr. White as operating manager of the Dallas district, Mr. Haynes will be responsible for the service, accounting and warehousing functions in the Dallas house as well as at the San Antonio, Ft. Worth, Amarillo and Austin, Tex.; and Shreveport, La. branch houses. Since 1949 Mr. Haynes

KITCHEN CLOCK DOOR CHIME

That price tag puts Liberty's Kitchen Clock Door Chime way ahead competitively. But price is only half the story —the quality is there, too. Silent, self-starting, U. L. approved clock is powered by a trouble-free sealed-in-oil movement. High-volume resonator type door chime sounds two notes for the front door, one for the rear—operates on any good bell transformer. The neat modern case, finished in white refrigerator enamel and trimmed in chrome, is right at home in any kitchen.

Write for current catalog

Size—9" high, 8½" wide, 3⅛" deep (clock face 5" square). Standard Package—6 chimes (individual gift packs). Shipping Weight — (6 chimes) 28 pounds.

LIST PRICE - - - - - - - $9.95
(Fed. tax on clock $1.00 extra)

Liberty Bell
SINCE 1924 MANUFACTURING COMPANY
MINERVA, OHIO

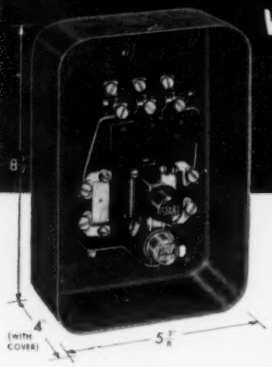
Nationally Advertised

DOOR CHIMES, BELLS, BUZZERS, TRANSFORMERS, SIGNALING DEVICES

STOP and START

with ARROW-HART

MANUAL STARTERS TYPE "RT"



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OVERLOAD PROTECTION

DESIGNED FOR DEPENDABLE OPERATION EASY MAINTENANCE

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Simple installation, quick and easy inspection and maintenance are just a few features of the many you'll get in these compact, tough and dependable manual starters. For instance, all components are readily-accessible *from the front;* there's plenty of room in the box for wiring; the unit can be serviced without removing it from the enclosure.

STOP and START is provided by the over-center mechanism. The heart-shaped cam-and-roll principle is activated by torque-type spring to give smooth 2-way operation. Simply push the START button for positive reset.

There's an A-H Type "RT" Manual Starter for every requirement — standard, dustproof, weatherproof and units only. Available in a wide range of phase, voltage and horsepower ratings; up to 7½ H.P.

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BRANCHES IN: BOSTON, CHICAGO, CLEVELAND, CINCINNATI, DALLAS, DENVER, DETROIT, LOS ANGELES, NEW YORK, PHILADELPHIA, SAN FRANCISCO, SYRACUSE
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has been district training supervisor for Graybar at Seattle.

The recently-appointed Minneapolis district operating manager, Mr. Wehman, comes to his new post from that of operating manager at Indianapolis. He succeeds W. G. Aasgard, who was forced to relinquish the position because of ill health.

The two newly-named district credit managers and their districts are: W. R. Snodgrass, Philadelphia; and C. H. Fries, Pittsburgh. Mr. Snodgrass was formerly district credit manager at Graybar's Pittsburgh house. He will be succeeded in that post by Mr. Fries, who will be responsible for credit activities in the Pittsburgh house and at the Youngstown, Ohio branch.

Raymond C. Dunn was appointed manager of the rural lines department of the Graybar Electric Co. with headquarters in Chicago. He succeeds George Vana, who is retiring on a pension after 34 years of service with the company. Mr. Dunn was formerly manager of outside construction sales for Graybar at Cincinnati.

Electric League Elects Wholesaler As President

LOS ANGELES—M. B. (Marty) Sauer, manager of the Vernon, Calif., branch of the Westinghouse Electric Supply Co., was recently elected president of the Electric League of Los Angeles, Inc.

Mr. Sauer has served as a member of the league's 25-man board of directors. He joined Westinghouse Electric Supply in 1946 as a salesman, was promoted to district sales promotion manager in 1947, and subsequently became district radio sales manager. In January, 1949, Mr. Sauer was appointed manager of Wesco's Vernon branch.

FCC Chairman Coy To Address RMA Convention

WASHINGTON — Chairman Wayne Coy of the Federal Communications Commission has accepted an invitation to speak at an industry banquet which will conclude the Radio Manufacturers Association's 26th annual convention June 8 at the Stevens Hotel in Chicago, it was announced recently. It will be Mr. Coy's first appearance before the television and radio manufacturers.

The RMA convention will cover four days, beginning on June 5, and will include meetings of all major groups, including the annual membership meetings of all RMA divisions and the annual membership luncheon. The convention arrangements are under the direction of Leslie F. Muter.

CROWD at booth of Raybro Electric Supplies, Inc., electrical wholesaling firm with headquarters in Tampa, at the Florida State Electrical Exposition was attributed to two factors: Antics of a bonneted and manicured pig named "Gibson Pete," and the invitation of a drink of cold water from the new Gibson refrigerator.

RCA Announces Color TV Transmission Progress

WASHINGTON—During a recent official demonstration of its electronic color television picture tube before the Federal Communications Commission here, the Radio Corp. of America revealed a development that makes possible the transmission of color television programs produced by the RCA all-electronic system over existing coaxial cables as well as over radio relay circuits. While this has been possible before over radio relay circuits, it had not been possible heretofore over existing cables because of the narrow frequency band width of the cable.

"In order to make immediate use of existing cable routes, pending the planned increase in their frequency band width," said Dr. C. B. Jolliffe, executive vice president in charge of RCA Laboratories, "RCA research engineers have devised special equipment which makes possible now the transmission of the RCA color pictures over these routes. The special RCA equipment insures that, at the very start of color television service, all existing network facilities, whether they be coaxial cables or radio relays, are available for use with the RCA color television system."

Announcement and demonstration of the new transmission development were made during the first official demonstration of the electronic color television picture tube before the FCC.

Two different types of the new color tube, designed specifically for use in the RCA all-electronic, completely compatible color television system, were exhibited. The reproduced pictures measured 9 x 12 inches, the images being created directly on the face of each tube by electrons activating fluorescent material in three

Designed for

RELIABILITY
PERFORMANCE
PROFIT

ARROW { **FLUSH TUMBLER SWITCH**
"T" RATED—10 & 20 AMPERES FOR ALL STANDARD CONNECTIONS

These new back- or top-wired flush tumbler switches give you plenty of performance, profit and reliability. They install quickly and positively. There's no need to bend or loop wire — it goes straight into the unit from the back and is held firmly and permanently by a wire clamp. They're safer, too — there are no exposed wire ends. And they're ideal for use with heavier (10 to 14) wire. Top-wiring with conventional binding screws is optional.

FEATURES? HERE ARE A FEW

Double switch blades protected by 2 Bakelite barriers to snuff arcing • Self-aligning double switch blades give positive connection with solid, one-piece stationary contacts • Plenty of wiring room in the box • Switch mechanism is totally enclosed • One-piece base plate, with washer type plaster ears, is firmly locked into switch cover.

10 and 20 Ampere sizes are available with Brown or Ivorylite handles or as lock-type units; for 1- and 2-pole, 3- and 4-way, and single pole, quadruple break connections.

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Address: 1605 LAUREL STREET HARTFORD 6, CONN.

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FITTINGS AND FIXTURES

B-I QUALITY Gives You

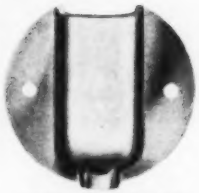
Faster Turnover

Repeat Orders

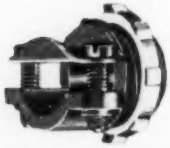
Satisfied Customers

Greater Profits

BLACKHAWK No. 711
Service Entrance Cable Fittings



BLACKHAWK No. 500
Sill Plates



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Non-Metalic Cable Connectors

BLACKHAWK No. 3626
Steel Clad Wire Holders

Immediate delivery from adequate stocks to electrical wholesalers only

Write for free catalog

BLACKHAWK INDUSTRIES

DUBUQUE, IOWA

Entrance Cable Fittings • Sill Plates • Conduit Entrance Caps
Connectors • Staples • Box Supports • Fluorescent Brackets
Cable Straps • Yard Lights • Wire Holders • Locknuts and Bushings

primary colors—red, green and blue. These colors blended into the natural hues of the original scenes being televised.

To show the complete compatibility of the RCA system, the color television signals were reproduced in black and white on a standard monochrome receiver throughout the demonstration.

Wholesaler Opens Binghamton Branch

SYRACUSE, N. Y.—The City Electric Co., Inc., electrical wholesaling firm of this city, recently announced the opening of a branch at 178 Water Street in Binghamton, N. Y.

The purpose of opening a branch in Binghamton is to give "on the spot" service to electrical contractors and merchants, and to better supply the needs and requirements of area industrial plants, it was announced. The branch's showroom will have a complete display of residential, commercial and industrial fixtures as well as major and traffic appliances.

The new branch will be under the supervision of Thomas F. Moulton, who has been in the electrical industry for a quarter of a century and has been associated with City Electric for over 20 years. He is a charter member of the Empire Chapter of the International Association of Electrical Inspectors, is on its board of directors, and is chairman of the display committee of the eastern section of the association.

The assistant manager of the Binghamton branch will be J. P. Keim, who has been connected with the electrical supply business for more than eight years. T. F. Keating and J. L. Bruet will cover the construction materials division for City Electric from the Binghamton operation. Glen Hadlick will be in charge of counter sales.

Lewt Corp. Head Gets Merchandising Award

NEW YORK—The "Stars and Stripes" award of the New York University School of Commerce, Accounts and Finance, and the Sales Association, a student organization, was recently presented to Alex M. Lewt, president of the Lewt Corp., Brooklyn, N. Y.

The award was made to Mr. Lewt for the most successful merchandising program of 1949 and was signed by Dean G. Rowland Collins, Prof. Darrell B. Lucas, chairman of the marketing department, and Martin Sass, president of the Sales Association.

The citation stressed that Mr. Lewt showed the American people and the world that private enterprise knows no barriers and has proved that if there is anything wrong with free enterprise it is that it is not enterprising enough.

SLOGAN for Anaconda Wire and Cable's nationwide industrial rewiring campaign.

Anaconda Campaigns For Industrial Rewiring

As a result of an industry-wide survey, which showed that 9 out of 10 industrial wiring plant systems are obsolete and inadequate, the Anaconda Wire and Cable Co. recently announced plans to launch a nationwide industrial rewiring campaign.

Directed to all industrial users of electrical power, the program, slated to begin this month, will enlist the cooperation of electrical contractors, plant maintenance personnel, electric utilities and wholesalers. All industry will be urged to survey the condition of its power wiring systems with the view to modernizing them and providing fully adequate distribution capacity for present and future needs, it was announced.

A new electrical wiring maintenance manual, entitled "POWER UP—And Be Prepared," is available as a guide for electrical contractors and plant maintenance staffs in making surveys, Anaconda announced.

Mitchell Names Russell As Advertising Manager

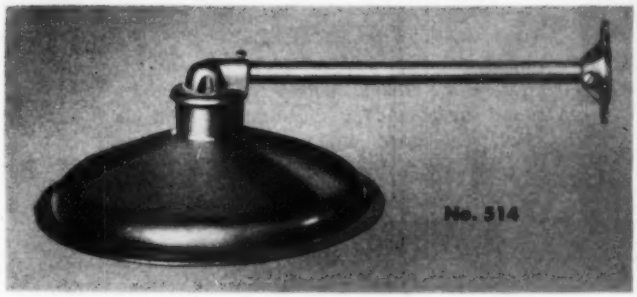
CHICAGO—The appointment of Lewis M. Russell as advertising and sales promotion manager of the Mitchell Manufacturing Co., of this city, was announced recently by Bernard M. Mitchell, president.

Mr. Russell will handle the promotion of Mitchell's lighting fixture, room air conditioner and radio specialty divisions as well as the firm's new television line.

Formerly advertising manager of the Culligan Zeolite Co., Mr. Russell spent many years as director of advertising and sales promotion for Hotpoint's refrigerator and home laundry equipment divisions.

B-I

FITTINGS AND FIXTURES



BLACKHAWK PORCELAIN ENAMEL YARD LIGHTS

Built for Bright Profits

- Highest quality porcelain enamel reflector
- Cast iron head and flange — zinc plated
- Galvanized conduit extension
- Independent reflector mounting
- Rigid design and construction
- Wired with porcelain socket and No. 14 Type T wire

Number	Diameter	O.A. Length	Watts
514	14"	24½"	150
512	12"	23½"	100

Immediate delivery from adequate stocks to electrical wholesalers only

Write for Free Catalog

B-I

BLACKHAWK INDUSTRIES

DUBUQUE, IOWA

Entrance Cable Fittings • Sill Plates • Conduit Entrance Caps
Connectors • Staples • Box Supports • Fluorescent Brackets
Cable Straps • Yard Lights • Wire Holders • Lockouts and Bushings

Everything you need from ONE Reliable Source

Paine makes a complete line of anchoring devices for solid or hollow wall construction. There are anchors for wood and lag screws — anchors for machine screws and bolts. You can get drills, screws and bolts that go with anchor shields or plugs for any kind of fastening job you can name—*all from one reliable source.* And if you need a special size or style for an unusual job, Paine can supply you at once. Why hunt around and waste valuable time? Order your supply today.

A few of PAINE'S Complete Line of Quality Anchoring Devices

Fig. 910
Expansion Bolt Anchors, B & N Type

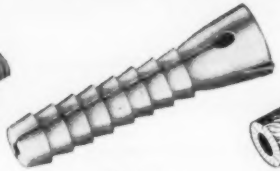


Fig. 950
Lead Wood Screw Shields

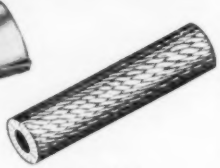


Fig. 955
Fiber Wood Screw Plugs

Fig. 970
Single Machine Bolt Shields

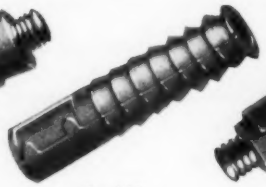


Fig. 980
Lag Screw Shields

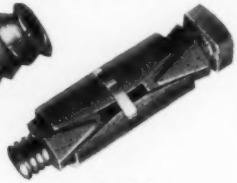


Fig. 990
Double Machine Bolt Shields

WRITE FOR CATALOG

The PAINE CO. 2979 Carroll Ave., Chicago 12, Ill.

Offices in Principal Cities

The Best Craftsmen Always Take PAINE'S

Wholesaler Elected Head Of Boston Elec. Institute

BOSTON—George H. Wahn, president of the George H. Wahn Co., electrical wholesaling firm of this city, was elected president of the Electric Institute of Boston, Inc.

Another electrical wholesaler, Ralph E. DeLoid, Westinghouse Electric Supply

George H. Wahn

Co., was elected treasurer. Other officers for 1950 of the Electric Institute of Boston, are: Thomas H. Carens, Boston Edison Co., vice president; J. J. Costello, J. J. Costello Co., secretary, and James A. Galvin, Boston Edison Co., assistant secretary.

In addition, it was learned that a series

The Jiffy Line

Established 1915

NO-KINK FISH TAPE

For Aluminum or Steel Conduit. Easiest to use on long runs or multiple 90° bends. Not a stiff steel tape. No reel necessary. Can't kink or break. Aircraft control cable for strength, rustproof flexible spring protected. Sizes 25-50-100 feet lengths.

Write for NEW LOW DISTRIBUTORS COST SHEET and complete Catalog.

Clyde W. Lint
Dept. 36, 1144 W. Washington Blvd.
Chicago 7, Illinois

of six weekly advanced lighting applications courses were completed recently. The courses were sponsored by the Electric Institute of Boston, Inc., in cooperation with the Illuminating Engineering Society, N. E. Section, and the Department of Architecture—Graduate School of Design, Harvard University.

Speakers at the advance lighting applications courses included: Charles Burchard, Graduate School of Design, Harvard University; R. G. Slauer, Sylvania Electric Products, Inc.; Dr. Walter B. Lancaster; Walter L. Kelley, New England Machine & Electric Co.; Phelps Meaker, General Electric Co.; J. L. Kilpatrick, Leader Manufacturing Co.; Willard Thompson, Thompson Engineering Co.; S. L. Cooke, General Electric Co.; Willard Allphin, Sylvania Electric Products, Inc.; H. N. McIntyre, General Electric Co.; J. L. Steffenhagen, Westinghouse Electric Corp.

Refrigeration Conference To Be Held May 25-28

The 1950 Midwest Refrigeration and Air Conditioning Educational Exhibit and Conference will be held May 25-28 at the New Hotel Jefferson in St. Louis, Mo. It is the first in a series of four sec-

HEINEMANN

Available Now!

100 AMPERE *Outdoor Service Equipment*

With the same dependable, FULLY MAGNETIC principle, protection for greater current loads is obtained. Designed for outdoor use, the enclosure is fully weatherproof. Box and cover may be locked independently.

HEINEMANN MAGNETIC CIRCUIT BREAKERS in this equipment act *instantly* on short circuit, while time-delay unit prevents unnecessary tripping. NO THERMAL ELEMENT. NO HEAT GENERATED. NO "DE-RATING" FACTOR NEEDED.

Send for New BULLETIN 2012.

HEINEMANN ELECTRIC CO.
152 Plum Street
Trenton New Jersey

the troffer it took

Guth LITE-BLOX

the ONE answer to every troffer need

From 10 years' experience with thousands of recessed troffer problems comes this dynamic development — a complete new "packaged" line that is far more . . .

SELLABLE!

- "Hand-Crafted" appearance with tailored trim
- Infinite design freedom — any pattern based on 12" grid
- 20 sizes of popular standard and slimline lamps
- Wide range of diffusing and shielding media

STOCKABLE!

- One basic unit for 31,360 troffer combinations
- Simplified ordering — one number for a complete row
- Flange types on hand can be quickly converted to teebar—or vice versa

INSTALLABLE!

- Complete units ready to install — no joiners
- Precision built on advanced-type machinery — easy to align
- Patented end KO's assure accurate foot-lengths — no trimming at end of rows

For full details call your nearest GUTH resident engineer or write for Bulletin 869-G

Guth LIGHTING

THE EDWIN F. GUTH COMPANY • ST. LOUIS 3, MISSOURI

Leaders in Lighting Since 1902

299

NEARLY EVERY WIRING JOB YOU SELL CAN USE

KEYSTONE

WIREWAYS AND AUXILIARY FITTINGS

PERMITS FASTER, NEATER, SAFER WIRING INSTALLATIONS.
FULLY APPROVED BY UNDERWRITERS' LABORATORIES, INC.

KEYSTONE
known for quality to

ARCHITECTS

CONTRACTORS

ELECTRICIANS

• Visit the Keystone Booth — No. 181 — at the 42nd Annual Convention, Atlantic City, June 12-16

If you're looking for extra profits on the wiring jobs you sell, you'll find they're easily earned simply by offering your customers Keystone square WireWays and auxiliary fittings. For the Keystone line is the *quality* line that fits naturally into almost any electrical distribution system. Provides durable, dependable, permanent protection for main power lines . . . for feeders, branch circuits, control and signal wiring systems. Quickly, easily installed . . . saves time, facilitates electrician's work. Adaptable to any layout . . . assures a neater, nicer, more flexible job as compared with piping and other improvised means.

So, for greater service to your customers . . . *and extra sales and profits for you* . . . make sure you're stocked with Keystone—Interchangeable Square WireWays 4" x 4", 4" x 6", and 6" x 6" in 1', 2', 3', 4' and 5' lengths, flangeless with screwcovers or with flanges and hinge covers plus auxiliary fittings. Complete line of bar hangers and outlet boxes also available. Send for fact-filled Keystone catalog and complete price information.

MANUFACTURERS' REPRESENTATIVES: *Still a few good Keystone territories open to experienced men. Write today for complete details.*

KEYSTONE MANUFACTURING COMPANY
23328 SHERWOOD ROAD • CENTER LINE (DETROIT), MICHIGAN

tional conferences that will be jointly sponsored by the Refrigeration Equipment Manufacturers Association and the Refrigeration Service Engineers Society.

"In selecting St. Louis as the site of our first 1950 conference, we feel that we are making the exhibits and educational meetings available to the largest number of service engineers, contractors and wholesalers possible in an area not previously covered," said F. G. Coggin, Detroit Lubricator Co., chairman of REMA's RSES Educational Conference and Relations Committee.

Other members of this committee are G. E. Graff, Ranco, Inc., vice chairman; Willis Stafford, Standard Refrigeration Co.; and H. T. Jarvis, Refrigeration Engineering, Inc.

John H. Spence, Hussmann Refrigeration, Inc., will head up the St. Louis activities of the Refrigeration Service Engineers Society, it has been announced by Chas. C. E. Harris, president of RSES.

Chicago Wholesaler Speeds Up Service

CHICAGO — The Electric Supply Corp., electrical wholesaling firm of this city, recently speeded up its service with the acquisition of a new easy-to-remember telephone number. In addition, the firm's communications facilities now includes: 25 incoming trunk lines, 10 additional direct outgoing trunks, and the latest in two-position switchboards.

Three Apprenticeship Conferences Announced

WASHINGTON—The Bureau of Apprenticeship of the U. S. Department of Labor recently announced that the three following interstate apprenticeship conferences are to be held in May and June:

1. The Southern States Apprenticeship Conference, to be held in Electricians Hall, Miami, Fla., May 3-5.
2. Western States Apprenticeship Conference, to be held in the Seaside Hotel, Seaside, Ore., May 22-25.
3. Eastern States Apprenticeship Conference, to be held in the Poland Springs House, Poland Springs, Me., June 8-10.

As in previous years, the objective of these conferences will be to review and promote apprenticeship activities in the metal, building, printing, service and miscellaneous trades throughout the states represented, it was announced.

Attending the conferences will be representatives of employers and labor; vocational education; federal, state and local governments, including the U. S. Labor Department's Bureau of Apprenticeship and state apprenticeship agencies; civic and other groups concerned with apprenticeship.

WALTER A. HUBER has been appointed general sales manager of the Wire Rope Division of John A. Roebling's Sons Co., according to a recent announcement by Charles R. Tyson, president, who stated that the appointment is part of a plan to decentralize the firm's various divisions. Mr. Huber will coordinate administrative and production work with merchandising schedules and customer requirements.

Slater Appoints Olson Assistant To President

WOODSIDE, N. Y.—Slater Electric and Mfg. Co., Inc., of this city, recently announced the appointment of Jack E. Olson as assistant to the president. Mr. Olson was formerly associated with the Plastic Wire and Cable Corp. as assistant to the sales manager for four and a half years.

Also announced by Slater Electric was the appointment of Charles B. Beitner as sales engineer. A graduate of Stevens Institute of Technology, he was previously a Slater Electric salesman covering the territory of northern New Jersey.

BullDog Eastern Division Makes New Assignments

NEW YORK—A number of personnel changes and new sales assignments for the eastern division of the BullDog Electric Products Co. were announced recently by H. H. Benfield, eastern division manager.

M. L. Martin has been assigned to BullDog's Baltimore office, operating under J. T. Kelly, Philadelphia district manager. J. A. McHugh is now covering Westchester County, operating under L. H. Hopper, New York district manager.

Formerly located in Binghamton, N. Y., L. T. Ryan is now covering the territory out of Syracuse for BullDog Electric Products. J. L. Powell has been added to the staff of the eastern division as a junior field engineer.

It was also learned that M. C. Nelson, formerly of BullDog's Baltimore office, is now established in Richmond, Va., in charge of a new district to give greater coverage to Virginia.

ONE GOOD SALE LEADS TO ANOTHER WHEN YOU HANDLE

KEYSTONE

WIRING INSTALLATION EQUIPMENT

KEYSTONE WIREWAYS

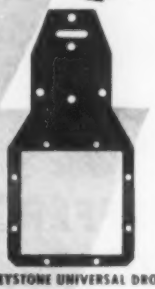
Flanged, with hinged cover. Available in 4" x 4" and 6" x 6" sizes. Standard lengths up to 5'. Flangeless with screwcover also available.

KEYSTONE 90° ELBOW AND PULL BOX

"Smoothflow" inside radius to facilitate drawing wire through. Sizes: 4" x 4" and 6" x 6".

KEYSTONE JUNCTION BOX

May be used in place of more expensive T's, L's and Crosses in addition to customary junction box application. Sizes: 4" x 4"; 6" x 6".



KEYSTONE UNIVERSAL DROP HANGER

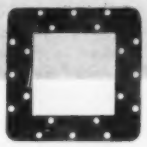
For suspending wiring troughs from overhead. Mounting screws and nuts furnished. Sizes 4" x 4" and 6" x 6".

KEYSTONE BAR HANGER-BOX ASSEMBLIES

Shallow and deep bar hangers in standard or special lengths. Available separately or with BX or Romex outlet boxes assembled.

KEYSTONE OUTLET BOXES

4" octagon boxes made of 14 gauge steel with ½" or combination ½" and ¾" knockouts, or BX or Romex clamps with nested fit for quick and easy pulling of wires to reduce installation costs.



WIREWAY REDUCING BUSHING

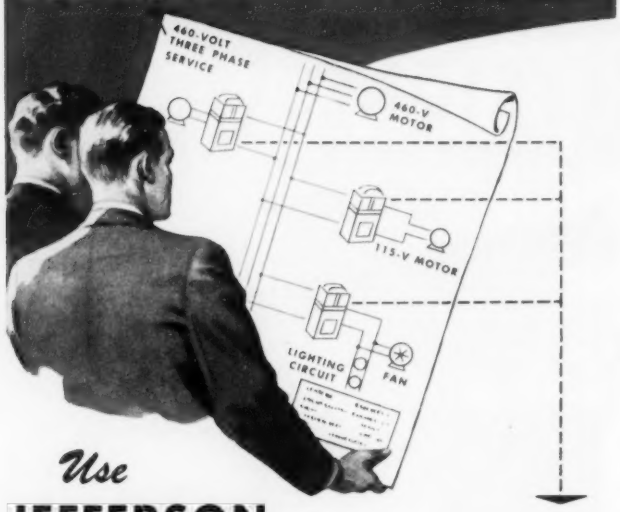
Provides quick, convenient means of effecting reduction from 6" x 6" to 4" x 4" WireWays without disturbing appearance or efficiency of the job.

BOOTH No. 181—Look in on Keystone at the 42nd Annual Convention, Atlantic City, June 12 to 16. There you'll get complete first-hand information on the profitable, fast-moving Keystone line of wiring installation equipment. A wide range of standard items stocked for immediate delivery; special equipment quickly made to your exact specifications. Remember, it's Booth 181. Or, if you're unable to attend, write today for the fact-filled Keystone Catalog.

KEYSTONE MANUFACTURING COMPANY

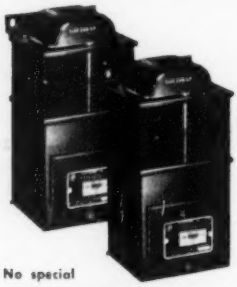
23328 SHERWOOD AVE. • CENTER LINE (DETROIT), MICHIGAN

FOR MODERN WIRING SYSTEMS



Use

JEFFERSON
Dry Type TRANSFORMERS



No special vaults are required.
— Each transformer is complete with roomy wiring compartment having knockouts for rigid or flexible conduit connections.

Approved by Underwriters' Laboratories, Inc.

BE SURE TO VISIT US AT BOOTH NO. 121 N.A.E.D. CONVENTION

In new plants, present practice calls for distributing power at higher voltages—460 or 575 volts—and providing for the lower voltage circuits for lighting and operation of portable equipment by means of compact dry type transformers. Thousands of Jefferson Transformers have been installed for such purposes.

For motor driven machinery where low voltages are required for control, relays, etc. Jefferson Power Circuit Transformers are often mounted on the machine itself.

The cost of this method of distribution is reduced—by savings in copper, conduit and fittings. Further economy is realized as all power is bought through one entry and one meter.

STOCK SIZES:—50 V.A. to 15000 V.A.
460/230 Volt Pri.—230/115 Volt Sec.
575 Volt Pri.—230/115 Volt Sec.

JEFFERSON ELECTRIC COMPANY
Bellwood, Illinois
In Canada: Canadian Jefferson Electric Co., Ltd., 384 Pape Ave., Toronto, Ont.

JEFFERSON ELECTRIC

Write today for Bulletin 501-15

Power Circuit Dry Type TRANSFORMERS

1950 Fan Specifications

The fan listing of The Air Equipment Co., Inc., Chicago, was inadvertently omitted from the February issue of ELECTRICAL WHOLESALING which featured the "1950 Fan and Ventilating Equipment Specifications Section."

The listing for this company is presented herewith.

KEY: WV...Window, Ventilating; AV...Attic, Ventilating; EX...Exhaust.

Cat. No.	Type	Size of Blades	No. of Blades	No. of Speeds	List Price
K18PW-3	WV	18"	3	3	$ 66.00
K20PW-3	WV	20"	3	3	80.00
K24W-1	WV	24"	4	1	85.00
K24W-2	WV	24"	4	2	95.00
N30-2	AV-EX	30"	4	1	99.50
N36-2	AV-EX	36"	4	1	106.50
N42-1	AV-EX	42"	4	1	126.00
N48-1	AV-EX	48"	4	1	186.00
N24-V1	AV-EX	24"	4	1	116.00
N30-V1	AV-EX	30"	4	1	136.00
N36-V1	AV-EX	36"	4	1	146.00
N42-V1	AV-EX	42"	4	1	156.00

E.E.W.A. Activities On Atlantic Coast

NEW YORK—The meeting of the Eastern Electrical Wholesalers Association was well attended and of great interest to the members. Resolutions of

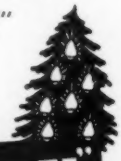
THE COMPLETE LINE for the TRADE

100% AMERICAN MADE

UNDERWRITERS APPROVED

BUY FROM YOUR JOBBER AND ASK FOR "POLLY"

Catalog and Prices on Request



"POLLY" CHRISTMAS TREE Lites

- They're Best!

WE CATER TO THE WHOLESALER

LEO POLLOCK CO.
Mfrs.
NEW YORK 13

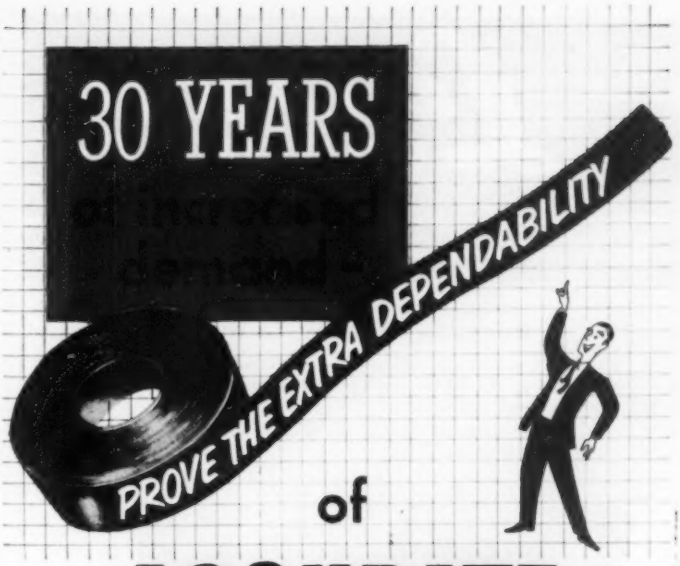
sympathy were adopted and ordered sent to the family of the late Sydney Meisel, a member of our board of governors. William Meisel of Hall Mark Electrical Sales Company in Brooklyn was elected to the board to replace his brother.

The change in policies of some manufacturers came in for quite a bit of discussion particularly insofar as the effect on the wholesaler's business was concerned. The problems which had developed in the Association's headquarters with relation to the compilation of the Overstock Sheet were mentioned in detail, and announcement of the forthcoming release of same was received by all the members with a great deal of pleasure.

The various committees appear to be functioning in their usual manner, and announcement was made of a meeting of the Security Fund Committee within the forthcoming week.

Regional meetings are also being resumed, and reports thereon will be rendered in the next month's issue by your reporter.

The Annual Meeting held last month resulted in the reelection to the board of governors of the following men: Henry J. Baitinger, Baitinger Electric Co., Inc.; Samuel M. Berman, D. Berman & Son; W. J. Kranzer, Crannell, Nugent & Kranzer, Inc.; William J. Kahn, Tudor



ACCURATE
FRICTION AND RUBBER
TAPES

MATERIALS — A major factor in the expanding demand for Accurate Tapes. Only finest grade cotton sheeting, purest live rubber are used in their manufacture. Result — permanent pliability, extra stretch, maximum cohesion — all important to clean, fast, economical taping.

WORKMANSHIP — Accurate Friction Tapes are super-calendered for complete impregnation of the base cloth. Careful slitting prevents tape from raveling when used. Accurate Rubber Tapes are specially compounded with unusual precautions taken to maintain caliper, elasticity and fusing characteristics.

QUALITY CONTROL—Every production run must fully meet fourteen exacting quality control checks. These tests guarantee the quality of every roll shipped — are the big reasons why Accurate tapes have increased in popularity every year for over 30 years.

READY NOW!
ACCURATE CATALOG

ACCURATE MFG. COMPANY
Garfield, New Jersey

IF IT'S TAPE . . . IT WILL PAY YOU TO MAKE SURE IT'S

FULLMAN Latrobe PRODUCTS

FLOOR BOXES ★ WIRING SPECIALTIES

Dependable—Easy To Install

There are no excess screws, wires or complicated parts in "Latrobe" Floor Boxes and Wiring Specialties. Their design and mechanism is simple, sure and compact.

That is why "Latrobe" Products are so quick and easy to install—so efficient in service.

No. 252-R Two Gang Adjustable Floor Box

This No. 252-R Two Gang Box is adjustable and has our No. 208 Receptacle in one section. One Cover Plate has ½" Flush Brass Plug, other has 2" Flush Brass Plug.

No. 110 "Latrobe" Watertight Floor Box

The neat compact design of the No. 110 Box quickens installation time and makes for smooth, trouble-free service. 208 Receptacle. Cover Plate is 3½" diam.

No. 280 Nozzle
No. 200 Cover Plate

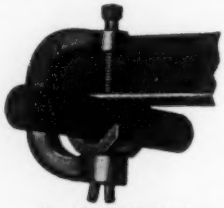
10 Amp. 250 volt Receptacle in Brass Housing, mounted on ½" brass pipe extension 3" long. Longer extension if desired.

"Bull Dog" BX Cable Staples

Millions of these high quality staples are giving dependable service in all parts of the U. S. Packed in cartons, bags, or barrels.

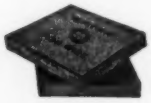
1050 Cable Staple for ROMEX and Non-Metallic Covered Cable

Here is a brand new cable staple designed especially for use with Romex and all non-metallic covered cable. 1⅛" long by 9/16" wide.



No. 470 "Bull Dog" Pipe or Conduit Hanger

Sturdy and dependable for hanging pipe or conduit ½", ¾" and 1" to steel beams up to ⅜" thick. Larger sizes for larger pipe.



Keystone Fish Wire

Finest grade flat steel wire in ten sizes, ranging from lightest work up to heaviest power wiring. 100, 150 and 200 foot coils.

FULLMAN MANUFACTURING CO.
LATROBE . . . PENNSYLVANIA

Electrical Supply Co., Inc.; Charles J. Kass, Central Electrical Supply Co., Inc.; Milton Hirschfield, Hirschfield Electrical Supply Co., Inc.; Lewis Lowenthal, Lowenthal Electric Supply Co.; Irving Slavin, Irving Electrical Supply Co.; Leo Siegel, Hobb Electric Supply Co., Inc.

Atlanta

The second regular meeting of the Southeastern Electrical Wholesalers Association was held at the Atlanta Biltmore Hotel on Friday, April 14th and was preceded on Thursday afternoon by a meeting of the board of governors.

Your reporter flew down to Atlanta and enjoyed to the extreme the meeting on Friday conducted by R. S. (Dick) McDonald of the McDonald Electric Company, Miami, the president of the Southeastern group. Approximately 40 members were present and 4 new applications were favorably acted upon.

The group also decided to attempt to hold a breakfast some morning during the National Convention in Atlantic City, as almost two-thirds of those present indicated that they would attend.

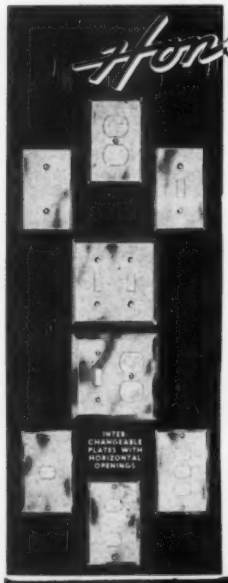
Various regional meetings were discussed and planned for Miami, Fla., Raleigh, or Charlotte, N. C., possibly Greenville, S. C., Atlanta, Ga., and some spot to be selected later in Virginia at dates to be convenient to the wholesalers

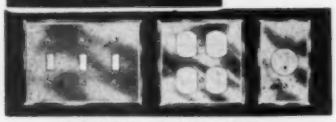
Honer

The Only PROTECTED SWITCH AND WALL PLATES

CHROME PLATED ▪ BRASS ▪ STEEL ▪ IVORY WRINKLED ▪

Write for CATALOG and PRICE LIST ▪





HONER MFG. CO.
412 S. GREEN ST. CHICAGO 7, ILL.

in the territory involved, and dependent upon the presence of M. L. Tice, local secretary and the demands upon his time. It was decided that the next quarterly meeting would be held on September 15, 1950, at Atlanta, Ga., in the Atlanta Biltmore Hotel, since this location seems to be the most central to all the members.

Officers of the newly-formed Southeastern Electrical Wholesalers Association include: R. S. McDonald of McDonald Electric Supply Co., Miami, as president, and J. J. Perry of the Electric Supply Co., Atlanta, Ga., as vice president. The following wholesalers were elected to the board of governors: Ben Weil, Mayer Electric Co., Birmingham; T. A. Wilkinson, Union Supply & Elec. Co., Charlotte; Harold Butts, Butts Electrical Supply Co., Charlestown, S. C., Charles Womack, Womack Electric Co., Danville, Va.; Jack M. Passilaigue, P & W Electric Supply Co., Columbia, Ga.; Russell Hughes, Hughes Electrical Supply Co., Orlando, Fla.; Paul Ramsey, Ramsey Electric Co., Chattanooga, Tenn.

Boston

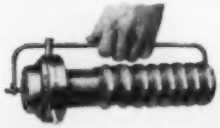
Wes Holmes, the new managing director of the New England Association flew into New York, and spent a week with us going over the numerous details that are always present, after which he drove to Philadelphia with your reporter and

Extra-Easy Threading OF SHORT NIPPLES

. . ."This RIDGID nipple chuck sure cuts the monkey-business out of threading short nipples."

New RIDGID Nipple Chuck fits any threading machine, power drive or vise

● And it's extra easy to sell the typical RIDGID worksaver advantages in this new nipple chuck that speeds every short nipple threading job! Fits any threading machine, power drive or vise—no special tools, parts or adjustments. Stop plug integral part of nipple chuck—no adjusting or changing. Threaded nipple released instantly by turn of nipple chuck. Pipe adaptors for ¼" to 1½", chuck takes 2" pipe. For easy, profitable sales, feature this new RIDGID nipple chuck.



Free Patented Carrier for any set

RIDGID

WORK-SAVER PIPE TOOLS

THE RIDGE TOOL CO. • ELYRIA, OHIO

BRONCO 60

Certified

Cords and Cables
with the
60% Neoprene Jacket

WESTERN

NEOPRENE CERTIFIED 2 COND

Positive 3 Way Protection

- a jacket that contains 60% by weight of new Neoprene
- certification of the Neoprene content by a registered, professional engineer
- cords and cables that are branded "Certified"

"3 way protection" gives you 3 impressive selling points. Now — with the word "Certified" imprinted in the jacket — a customer can tell jacket contents at a glance. And the buyer who learns to depend on you to deliver superior products becomes a steady customer. Build sales with the wire that's CERTIFIED!

WESTERN INSULATED WIRE CO.
1001 EAST 62ND ST. • LOS ANGELES 1, CALIFORNIA

spent a day there visiting the various Philadelphia members. The net results according to Wes were most enlightening and he expressed the thought on leaving that the problems in Philadelphia and New York were not too far removed from those in New England.

Philadelphia

The April meeting of the Philadelphia branch was the annual meeting at which time the members elected T. Curtis Flynn of Camden Electric Fixture Company, Camden, N. J., as the new chairman and Philadelphia representative on our board of governors in New York. The entire membership gave a rising vote of thanks to Nate Nitzky of United Light Company for the splendid job that he performed as chairman for the past twelve months.

A membership committee was appointed by the new chairman consisting of Nate Nitzky, Harry Horn and Sol Newman of the West Philadelphia Electric Supply Co., together with T. Curtis Flynn to arrange a dinner, if possible, in the near future. Approximately half of the members present indicated their intention to attend the National Association Convention in Atlantic City in June, and the possibility of holding a breakfast for the Philadelphia members was discussed and ordered to be considered for a later report.

Ever-Ready

PIN TYPE

Sockets offer the most convenient and economical means of obtaining outdoor or indoor temorary lighting, since the tedious stripping, soldering and taping operations are eliminated.

In street decoration, construction lighting, carnivals, roadside stands, etc., their ease of installation and convenient flexibility is unsurpassed.

Insist on UNION'S PIN TYPE SOCKETS — the FIRST and the BEST.

No. 43308 & 43318
Standard

No. 44408
Intermediate

Sockets

No. 11108
Candelabra

UNION INSULATING CO.
PARKERSBURG, WEST VIRGINIA

"EASY TO FISH"

ATLANTIC
FISH WIRE

WITH
ATLANTIC FISH WIRE

SERVICE ENTRANCE CAP
1819

ATLANTIC CONDUIT
FITTINGS CO.
BOSTON, MASS.

OBITUARIES

Walter E. Poor

Walter E. Poor, 64, chairman of the board of Sylvania Electric Products, Inc., died April 4 at St. Lukes Hospital in New York City.

A native of Salem, Mass., Mr. Poor was graduated from Massachusetts Institute of Technology in 1908 with the

Walter E. Poor

degree of electrical engineer. After a period spent with the Boston Elevated Railway, he joined his brothers in 1911 in the manufacture of electric lamps at Danvers, Mass.

As electrical engineer for the Hygrade Lamp Co., predecessor of Sylvania Electric Products, Mr. Poor took over the

in CORDial agreement

Your customers will get along like newlyweds with their electrical appliances, if the cord sets are CORNISH . . . the sure guarantee of perfect contact and long wear . . . the happy farewell to CORDelirium!

CORNISH

CORDS and CORD SETS

APPROVED BY UNDERWRITERS LABORATORIES

Selected by leading manufacturers . . . why not by YOU

A full line of Flexible Cords for the Repair and Service industry, obtainable through Jobbers and Distributors

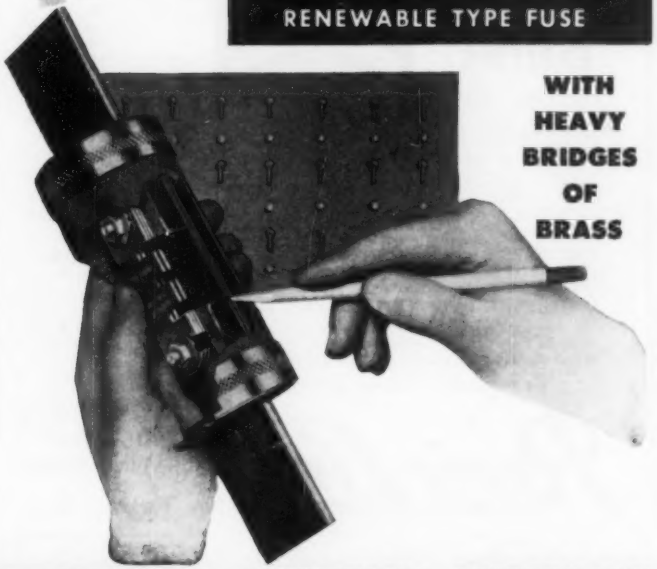
CORNISH WIRE COMPANY, INC

15 Park Row New York 7, N. Y.

NEW

Monarch HEAVY DUTY

RENEWABLE TYPE FUSE



WITH HEAVY BRIDGES OF BRASS

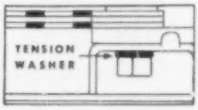
DESIGNED TO WITHSTAND TEMPORARY EXTRA HEAVY OVERLOADS

Approved by Underwriters Laboratory

Cool . . Truly Aligned . . Maximum Use of Brass . . . Adding up to Lower Power Waste Than Ever Before! And Here's How!

This new heavy duty fuse incorporates many time-tested Monarch features. The newest, — thick brass bridges widely separating the terminals from the fiber bar and made with ventilating holes — allow maximum dissipation of any internal heat.

The Monarch method of locking these bridges securely to the terminals and fiber bar, together with Monarch's positive lock construction and compressed tension washers, insures permanent true alignment.

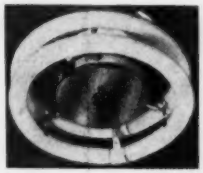


. . . IMPROVED SERVICE PER DOLLAR INVESTED

SPECIFY Monarch FOR SUPERIOR FUSErvice

MONARCH FUSE CO., LTD.

118 E. First Street Jamestown, N. Y.



EXCITING

Beautiful, stream-lines of the central body, the colorful pastel tones and brilliant chromium trim are instantly attractive. CIRCLEAR answers the demand for a ceiling fixture that is different—to blend into any color scheme.

DISTINCTIVE

Complete re-design of the transformer into the slender, circular body permits assembly of two or more circular tubes into a close-fitting unit. This has never been done before. The CIRCLEAR is as far ahead of the old fluorescents as the incandescent was over carbon filaments. You build customer good-will with this light which pleases the eye and flatters the pocketbook.

Ideal for Kitchen, Bath, Foyer, Rumpus-Room, Office, Store.

Write for folder, prices.

CIRCLEARS for homes and for offices in one and two tube fixtures; CIRCLEARS of three to ten tubes work into dramatic lighting effects for retail stores, public rooms, show windows, etc.

ALL OUR FIXTURES ARE TRIGGER START

No starters to contend with. Maintenance is reduced to a minimum. No delay in starting; no flicker. Switch on, the light is on. All units are U.L. approved. Tubes available at 25% discount temporarily.

We manufacture a full line of fluorescent and slimline fixtures.

Sales representatives invited to write, stating qualifications and territories they could cover.

RAPID-LITE FIXTURE CORPORATION

622 St. Ann's Avenue

New York 55, N. Y.

THIS IS IT!

World-wide recognition for this outstanding line of electric soldering irons—

HEXACON

—specified by the big names for the *TOUGH JOBS!*

★ MINNEAPOLIS HONEYWELL
★ RADIO CORP. OF AMERICA
★ STROMBERG-CARLSON
★ WESTERN ELECTRIC
★ WESTINGHOUSE
★ EMERSON
★ KAISER
★ BENDIX
★ SPERRY,
etc.

PLUG OR SCREW TIPS
40 to 700 Watts
¼" to 1¾" Tip Dia.

Follow the leaders and you'll specify HEXACON! They'll efficiently solve your soldering problems too! Write for literature.

Important news to WHOLESALERS

HEXACON soldering irons are a profitable line for the distributor, dealer and user because it represents one of the most complete lines available today. It is backed by famous users throughout the world, and an aggressive hard-hitting sales promotion campaign is telling the story to a quarter of a million key men in industry each month.

HEXACON ELECTRIC CO.
146 W. CLAY AVE. ROSELLE PARK NEW JERSEY

development and production of tungsten lamps. Later he became vice president and general manager of the firm.

In 1940 he was made executive vice president of Sylvania, and in 1943 was elected president. He became chairman of the board in 1946.

At the time of his death, Mr. Poor was a trustee of Salem (Mass.) Hospital, director of Junior Achievement, Inc., director of the Sound-Scriber Corp., and member of the Committee on Corporations of the Development Fund of Massachusetts Institute of Technology.

His clubs were Siwanoy Country Club, Union League Club of New York, and Salem (Mass.) Country Club. He was a member of the American Institute of Electrical Engineers and the Institute of Radio Engineers.

Surviving Mr. Poor are his wife, Mary Bradshaw Poor; two sons, George Russell and Arthur Phippen; and two brothers, Frank A., founder and chairman of the finance committee of Sylvania, and Edward J., who retired a few years ago as chairman of the board.

Clarence L. McClure

Clarence L. McClure, 45, president of the McClure Electric Co., electrical contracting firm of Dallas, Tex., died suddenly of a heart attack on April 1 at his home in Dallas.

Mr. McClure became an electrical contractor in 1931, continuing in this field until 1942, when he enlisted for army service. Upon being honorably discharged with the rank of captain, he returned to the electrical business and remained active with the McClure company until his death.

He was a member of the management and technical personnel training committee of the National Electrical Contractors Association. His brother, Jim L. McClure, is district 5 vice president of NECA.

Mr. McClure was constantly engaged in electrical, fraternal, religious and welfare activities. He was a member of the East Grand Avenue Baptist Church, and belonged to the Society of American Military Engineers; Texas Society of Professional Engineers; Camp Board of Camp Woodland Springs for underprivileged children; Salesmanship Club; Pentagon Blue Lodge No. 1080; Hella Temple Shrine, and York Rite and Scottish Rite bodies.

He is survived by his wife, Waldine; a daughter, Patricia L.; two brothers, Jim L. and Frank J., all of Dallas.

ART SPECIALTY COMPANY
3245 W. Lake St., Chicago 24, Ill.

THE 'FRIGID' LINE OF FANS IS BUILT FOR MAXIMUM EFFICIENCY AND ENDURANCE, QUIET OPERATION, ECONOMICAL PERFORMANCE.

WRITE FOR COMPLETE CATALOG

CIRCULATORS & DEVICES MFG. CORP.
128-168 THIRTY SECOND STREET
BROOKLYN 32, N. Y.

ASSOCIATION NEWS

LOS ANGELES—Plans for an "all-out" industry-wide home freezer promotional campaign are well set-up and from all indications it will be the most successful one held to date. The Electric League of Los Angeles in cooperation with the manufacturers of home freezers, distributors, retailers and the Los Angeles Evening Herald-Express, is leaving nothing undone to put this campaign "over the top."

With "teaser ads" beforehand, the opening gun will be a special section carried in the Herald-Express on April 18th participated in by manufacturers, distributors and retailers and dealing exclusively with "home freezers." This will be followed two days later with a special school and demonstration which is being presented by the Herald-Express, under the direction of their Home Economist Hazel Blair Dodd, will clearly show the many advantages of the "Home Freezer" and its proper use—packaging and storing of food—demonstrate and show its practical economy in the saving of time and money, thereby proving its value to the housewife—and many other interesting facts about this modern method of living.

The Annual Membership meeting was held recently with a very representative group in attendance. The business portion of the evening started promptly at 8:00 p.m. with W. J. "Bill" Quinn, managing director, extending greetings to all present, followed by the President's Annual Report given by Willard F. Hellman.

PHILADELPHIA—The Electrical Association of Philadelphia recently initiated the second phase of its widely-known movement directed toward wiring modernization at the residential level of the local market. The spring phase of the wiring modernization ac-

AT IT SINCE '92 ALLEN

FLUX FOR SODERING BRAZING WELDING

ALLEN

L. B. ALLEN CO., INC.
6701 Bryn Mawr Ave.
Chicago 31, U. S. A.

"Who Says . . . *REGULAR PHONES can handle intercom needs?*"

Sure she's mad!

And you'd be too if you were trying to handle pesky (to her!) intercom messages in addition to important outside calls. Stop wasting *her* time and *your* money. Get real efficiency by installing a Couch Private Phone system . . . free outside lines . . . replace regular phones used only for intercom calls . . . reduce unnecessary calls.

From 2 to 50 phones, Couch has the system right for your needs. Write for information today.

Type 52 Four Button Model

COUCH AUTOPHONE SYSTEM

. . . with simplified dialing

30 or 50 line systems . . . "one shot" dialing saves time, eliminates manually operated switchboard . . . simple, rugged, inexpensive.

S. H. COUCH CO., INC.

Dept. 405 No. Quincy 71, Mass.

Private Telephones for Home and Office . . . Hospital Signaling Systems . . . Apartment House Telephones and Mailboxes . . . Fire Alarm Systems for Industrial Plants and Public Buildings.

tivity will continue until June 30th, and is being conducted through the cooperative efforts of electrical contractors, distributors, manufacturers of wiring supplies, the utility company, and the electrical association.

PITTSBURGH—With C. W. Hartenfels, branch manager of General Electric Appliances, Inc., as president, the new officers and directors of the Electric League have already launched plans to assure another successful year.

George W. Provost, Jr., Doubleday-Hill Electric Co. has been appointed chairman of the prize committee for the 1950 Picnic. Mr. Provost's committee will function under the direction of the general chairman, L. R. Raphael, Raphael Electric Company.

Members and friends who attended last year's outdoor jamboree agreed that Daniel's Farm provided excellent facilities for sports and entertainment, and the Picnic committee has chosen the same accommodations for the 1950 affair, scheduled for June 17th.

R. L. (Tex) Whitney, Westinghouse Electric Supply Co., has been named chairman of the Industrial Section, to succeed George Duerr, West Penn Power Co.

A Real Opportunity . . .

SALES MANAGER WANTED

. . . with Volume Ideas!
. . . with "Know-How"!
. . . who wants More Money!

for National Manufacturer of quality tested lighting equipment. Must have thorough knowledge of selling thru electrical wholesalers and to large industrials. Salary and profit-sharing plan will interest real producer.

Box 6330
Electrical Wholesaling
330 W. 42nd St., New York 18, N. Y.

Salesmen--
Write Us Today for
FREE SAMPLE!

The Sherman
***"WEDGE GRIP"**

*U. S. Registered Trademark

See for yourself why this highly popular "Wedge-Grip" is preferred by thousands, for fixtures, junction boxes, service entrance, outlet boxes, small and large motors, electric ranges, etc. See the "V"-shaped corrugations and movable pressure plate that grips wires securely and permanently. Mail postcard today for sample. It's FREE, to all wholesalers' salesmen.

H. B. *Sherman* MFG. CO.
Battle Creek, Michigan

RADIANT FLUORESCENT OUTDOOR LIGHTING *BRINGS SALES YOUR WAY...*

- U-L approval
- 1/3 cost of incandescent lighting
- 67% more light (actual test)
- visible at longer distances
- shines thru fog and haze
- weatherproof construction
- easy to install and maintain
- hinged glass door for easy accessibility
- operates efficiently below zero

WALL-LITES
POST-LITES

for
service stations • used car lots • outdoor theatres • night clubs • tourist courts • restaurants • highways • hotels • stop-and-socks • department stores • drive-ins • commercial building entrances and many other installations.

Distributed only to recognized wholesalers.

Write today on your letterhead for new catalog covering the most complete range of fluorescent units on the market.

REPRESENTATIVES:
Some choice territories still open.

GREAT NORTHERN MFG. CORP.
4221 Harrison St., Dept. EW-5, Chicago 24, Ill.

MORE FACTS ON PRODUCTS

Electric Heater—A new, pocket-size folder, which describes and illustrates the operation, uses, specifications, cost, etc., of an improved heater, is now available on request to the Frank Adam Electric Co., 3650 Windsor Place, St. Louis 13, Mo.

When writing mention ELECTRICAL WHOLESALING

Color Television—A new booklet published by the Radio Corporation of America is entitled "Answers to Questions About Color Television." The purpose of the booklet is to summarize in non-technical language the clear-cut advantages of the RCA system and relate them to the practical problem of providing a regular service of color television to the public. Department of Information, Radio Corporation of America, 30 Rockefeller Plaza, New York 20, N. Y.

When writing mention ELECTRICAL WHOLESALING

Fan Specifications—Bulletin 110 entitled, "Standards, Definitions, Terms and Test Codes for Centrifugal, Axial and Propeller Fans" includes under one cover all information previously published in four separate bulletins as well as new tables on size standards for various types of fans and illustrations of revised fan arrangements. Available without charge on request to the National Association of Fan Manufacturers, Inc., 2159 Guardian Bldg., Detroit 26, Mich.

When writing mention ELECTRICAL WHOLESALING

Harmonic Ringing Assembly—In this day and age, many factories are finding it necessary to have a source of supply for experimental and production testing—Circular 350-FCP describes an interesting machine that will give odd frequencies such as 15 cycles, 25 cycles, 180 cycles, etc., and provides as many as six different frequencies. Kato Engineering Company, 1415 First Ave., Mankato, Minnesota.

When writing mention ELECTRICAL WHOLESALING

Meter Sockets—A new booklet describes and illustrates a new line of meter sockets including construction details, applications and specifications. Code Electric Products Corporation, Fox Bldg., Philadelphia, Pa.

When writing mention ELECTRICAL WHOLESALING

Outdoor and Indoor Lanterns—The ranch home collection of outdoor and indoor type of lanterns is pictured in a 4-page folder issued by Artolier Corp., Lodi, N. J.

Another NEW Profit-Maker for MARCO Jobbers

MARCO JUNCTION BOX UNITS
Approved for "R" & "T" Wire!

J-1 Housing with 94 Lens

Variety of Lens units available

Lens No. 95 Lens No. 84 Lens No. 31

Appeal to Contractors

★ Eliminate additional Pull Boxes and Special Wire
★ Adjustable, No-Sag Bar Hangers Provide Easy Installation
★ Pull Box is ALWAYS accessible without dropping Housing

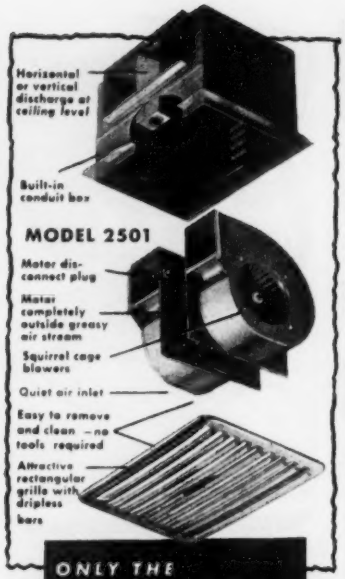
Architects, Builders, Owners

★ Wide Variety of Lens Units
★ Handsome, Well-Designed
★ Chrome, Copper, Brass Finishes

It will pay you well to stock the complete MARCO Line

Marco recessed lighting units are competitively priced yet quality built. Advanced engineering bring your customers all important improvements *first*. A complete line for residential or commercial installations. Factories on both coasts to serve you.

MARCO **MARVIN MANUFACTURING CO.**
3071 East 12th Street • Los Angeles 23, Calif.
13-21 So. 6th Street • Newark, New Jersey



ONLY THE
TRADE-WIND
CLIPPER
HAS ALL THESE
ADVANTAGES

FOR the best method of ventilating kitchens, bathrooms, laundries, dens or other small rooms specify and install the Trade-Wind Clipper. This proven ventilator is the only *small room unit* that gives the home owner every worthwhile advantage.

Squirrel cage blowers, accepted and used in air conditioning systems and for forced air heating, are used exclusively in the Trade-Wind Clipper. This forced air discharge, located at the ceiling, traps all unwanted air and expels it instantly. Trade-Wind also has located the motor completely outside the greasy air stream. The motor stays clean indefinitely—requires far less service—and is guaranteed for 5 years. No other small room ventilator combines all these outstanding advantages. In addition, Trade-Wind Clippers are easy to install—they are competitively priced*—and they make every new owner another salesman for the Trade-Wind line.

Get the complete story from your local supply source, or mail the coupon today.

*Important price reduction has just been made on Model 2501.

MAIL THE COUPON TODAY

TRADE-WIND MOTORFANS, INC.
8721 S. Main St., Los Angeles 37, Calif.

Please send me the complete story on the Trade-Wind Ceiling Ventilator.

Name_____

Address_____

Planned Lighting—A new concise 32-page planned lighting guide, covering the latest concepts of Planned Lighting, the benefits to be gained and the methods to employ to put a planned lighting program into effect has been published by Benjamin Electric Mfg. Co., Des Plaines, Ill. Entitled, "A Planning Guide to Improved Plant Lighting," copies of the brochure are available without cost to industrial executives, plant operating personnel and all those concerned with industrial lighting. The guide covers the planned lighting subject from the management viewpoint, breaking the problem into three major parts: Economics, Program Development and Equipment Selection.

When writing mention ELECTRICAL WHOLESALING

Power Circuit Transformers—A handy ordering table is included in the new Jefferson Electric Company folder C-15 on power circuit transformers. Transformers from 50 to 15,000 VA capacity are conveniently catalogued. A typical wiring diagram showing the use of higher voltage circuits is also included. Jefferson Electric Co., Bellwood, Illinois.

When writing mention ELECTRICAL WHOLESALING

REPRESENTATIVES WANTED

Progressive Manufacturer of Floodlight Assemblies and Vapor Proof Fixtures requires active and sincere representation.

Territories available:

Illinois, Chicago; Charlotte—(Virginia, Carolinas); Cleveland—(Northern Ohio); Cincinnati—(Southern Ohio, Kentucky); Memphis—(Western Tennessee, Arkansas, Northern Mississippi); Denver—(Mont., Wyo., Colo.); Seattle—Portland (Wash., Ore.); Omaha—(Ia., Neb.); Los Angeles—San Fran. (Calif., Ariz., N. M.); Missouri; Minnesota; Georgia and Alabama.

RW-2454, Electrical Wholesaling

330 W. 42nd St., New York 18, N. Y.

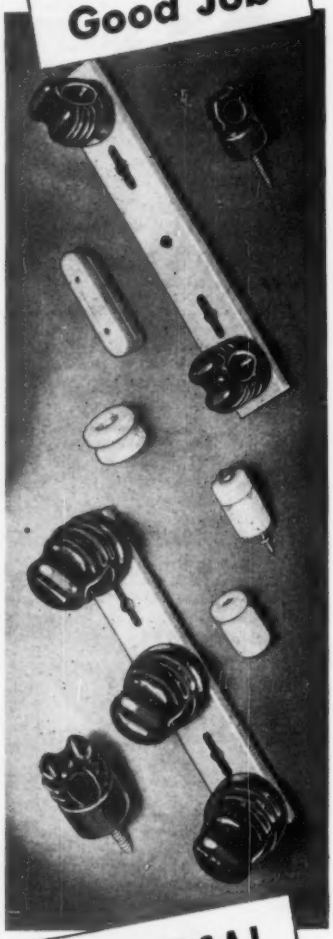
REPRESENTATIVES
wanted by
MANUFACTURER OF

- *Pull Boxes*
- *Cutout Boxes*
- *Flush Cabinets*
- *Special Cabinets*

Several territories available to aggressive sales organizations.

Address: Box 8188
Electrical Wholesaling
1510 Hanna Building Cleveland 15, Ohio

Make Every Job a Good Job



UNIVERSAL PORCELAIN INSULATORS

THE UNIVERSAL
CLAY PRODUCTS CO.
1549 EAST FIRST ST.
SANDUSKY, OHIO

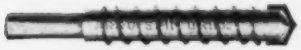
ANCHOR YOUR

ELECTRICAL FIXTURES

the EASY WAY
the BEST WAY

TRADE **ARRO** MARK

Anchoring and Fastening Devices



FLEXO-FLUTE SPIN DRILLS

Flexible spring cleans drill cuttings out of hole automatically. No packing, makes faster, cleaner holes. Carboloy tipped.

MACHINE SCREW ANCHORS

Easy to install. Provide dependable anchorage for fixtures in brick, concrete and other masonry. Work can be dismounted and reassembled easily.

WING-TYPE TOGGLE BOLTS

Unsurpassed for quick, secure anchorage in hollow construction. Have endless uses in electrical installations.

LITTLE MAJOR TURNBUCKLES

Ideal for installing brace wires for electric signs, television antennae, etc.

SOLD ONLY THROUGH JOBBERS

ARRO EXPANSION BOLT CO.
MARION, OHIO

Pump Control Switches—Bulletin 550 contains 8 pages of descriptive data and illustrations on pressure, float and vacuum type electric switches made by Square D Company, 6060 Revard St., Detroit 11, Mich.

When writing mention ELECTRICAL WHOLESALING

Residential Lighting Fixtures—A 2-page looseleaf booklet published by the Glasolier Co., 923 Penn Ave., Pittsburgh, Pa., presents the company's line of home lighting fixtures.

When writing mention ELECTRICAL WHOLESALING

Switchboards—developed to meet the need for economical control of generation and distribution facilities of public and private utilities, industries and institutions are described in a new eight-page bulletin (No. 18B6149A) released by this company. Units covered in the bulletin include duplex switchboards for convenient centralized control, benchboards for concentrated control of meters and relays, and rectifier control cubicles for rectifier auxiliary equipment. Available upon request from Allis-Chalmers Mfg. Co., 940 S. 70th St., Milwaukee, Wis.

When writing mention ELECTRICAL WHOLESALING

WANTED

SALES REPRESENTATIVES

BALTIMORE
NEW ORLEANS
PITTSBURGH
ST. LOUIS

Technical item, now widely distributed and aggressively advertised. Sold through electrical supply houses and "Big Three." Attractive proposal.

Box 6488, Electrical Wholesaling
330 West 42nd St., New York 18, N. Y.

sales manager
WANTED

Manufacturer of quality instruments with nationwide distribution wants sales manager to travel with representatives, hold jobber salesmen meetings, replace weak representatives, etc. Line is aggressively advertised and promoted. Excellent salary and override. All replies confidential. Write full details as to education and previous experience.

Box 6492 Electrical Wholesaling
330 West 42nd St., New York 18, N. Y.

MORE AND MORE
ARCHITECTS
ARE SPECIFYING

MULTI

LIGHTING EQUIPMENT
FOR
GYMNASIUMS
AND
SWIMMING POOLS

BECAUSE THE MULTI LINE IS COMPLETE AND THE QUALITY IS DEPENDABLE

MORE AND MORE
WHOLESALERS

ARE GETTING COMPLETE DESCRIPTIONS OF THIS AND OTHER FIXTURES BY REQUESTING

BULLETIN "S"

HAVE YOU RECEIVED YOUR COPY?

FOR SWIMMING POOLS

THIS VAPORPROOF FIXTURE DOES THE PERFECT JOB OF GENERAL LIGHTING. 500 WATT LAMP IS THOROUGHLY ENCLOSED IN CLEAR, OPAL OR HEAT RESISTING GLOBE. 18" DIAM. REFLECTOR IS STEEL. PORCELAIN ENAMELED HOOD IS HEAVY CAST ALUMINUM.

Participating Member RLM Institute

DISTRIBUTED THROUGH ELECTRICAL WHOLESALERS.

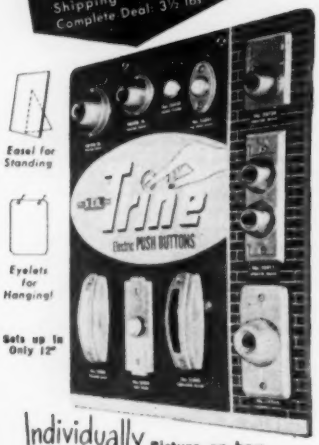
MULTI
ELECTRIC MFG., Inc.
4223 W. LAKE ST. CHICAGO.

Trine RINGS THE BELL AGAIN

DISPLAY, New, Compact COMPLETELY ASSEMBLED

With Samples of Sales Tested Best-Selling Trine Electric Push Buttons. Shipping Weight of Complete Deal: 3½ lbs

PERMANENT! COLORFUL!



Easel for Standing

Eyelets for Hanging!

Sets up in Only 12"

Individually boxed! Picture on box ends for quick identification — plus 'Can't-Lose" Screw Grips

New Push Button Profit Deal. Ten best-selling styles seen at a glance! Introductory working stock of 15 assorted boxed units packed with display. Complete assortment, 25 pieces. Push two displays — one for windows, one for counters — and double profits!

Get all the details today! Write for catalog sheets and samples.

KEIL Trine

KEIL QUALITY FAMOUS SINCE 1876

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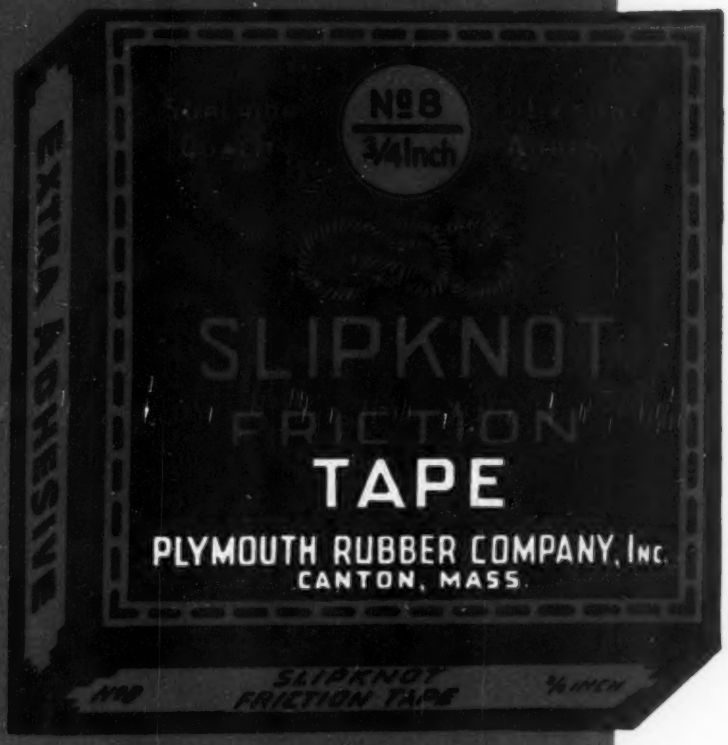
THE LARGEST SELLING FRICTION TAPE IN THE WORLD



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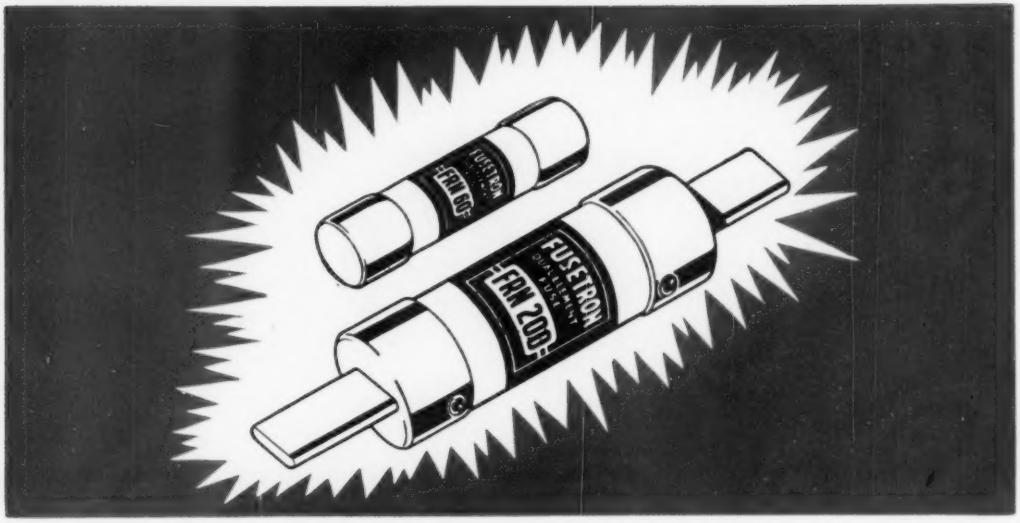

Ideas that will help you sell

Probably every salesman has at times felt he needed new ideas or angles to close a sale. He realized he didn't have enough of the right kind of information at hand to properly handle the sales interview.

Should this ever happen to you in regard to Fusetron dual-element fuses, there are two ways in which you can get real help.

First, there is the BUSS Fuseman in your territory. He is always glad to pitch in and help you close a hard-to-make sale. Then, too, he is always being fed new information from the factory that he can pass along to you. By all means call on him when you want information about FUSETRON or BUSS fuses.

When you need quick action

Sometimes you haven't time to wait for the BUSS Fuseman. Then simply turn to the Bulletin on Fusetron fuses that you carry in your binder.

This bulletin is more than a price sheet. It shows how Fusetron fuses are made—and it does a lot more—it SHOWS THE BENEFITS THE USER GETS by replacing ordinary fuses with Fusetron fuses.

It is a briefed up sales presentation. It answers the kind of questions that come up in a sales interview. It tells of the many kinds of protection that Fusetron fuses give—many of which were not heretofore available.

Whenever the question of electrical protection comes up, remember this bulletin. In most cases it will give you all the material you need to make a sale. Even dimensions and other such ordering information are included in this complete sales bulletin.

Maybe you had better check your binder now. See that your copy of the Fusetron bulletin is in good condition. If you need a new copy, see the BUSS Fuseman or ask your Sales Manager. Don't take a chance on losing a sale because you haven't the latest information with you.

Bussmann Mfg. Co., St. Louis, Mo., Division McGraw Electric Company

Sell Fusetron fuses for installation . . .
throughout the entire electrical system